Flood Control Project Maintenance Levee Inspections

LMA District Cover Sheet

Spring 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)						
† Overall LMA Rating (Fall Only)										
	** Non-receipt of Summ Reports may effect or									
† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.										
FALL INSPECTIONS: The overall maintena within the attached u			on and maintenance de nded to be an indiction o							
Comments										

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles
Unit No. 01 Cherokee Canal	Right	18.19

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/17/2018 - 4/17/2018			
DWR Inspector	Bob Duffey			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start		Rating **	Α	Issue No.		1	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS La	atitude	e/Longitude	
Category				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals o					0	
DWR ID DWR_MA0013_01_s _ 2013_1							
		Comn	nent Cod	le			
		Inspecto	or Comm	nent			
The LMA h	nas the O8	M manuals.					

No Photos

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	.evee		GPS La	atituc	de/Longitude	
Calegory		Issue Type + Ma Loarthen Levee mergency Supplies &	Start			End	
Item	Emergency Supplies &				0		0
пеш	Equipmer	nt			0		0
DWR ID	DWR_MAG	013_01_s _ 201	3_8				
		Comn	nent Cod	de			

No Photos

Inspector Comment
The LMA has adequate flood fight supplies and equipment.

LM Start		Rating **	Α	Issue No.		16			
LM End		Issue Type +	Ma	Location *					
Category	Earthen Levee			GPS Latitude/Longitude					
Calegory		Start		End					
Item	Flood Preparedness & Training				0		0		
пеш					0		0		
DWR ID	DWR_MA0	013_01_s _ 201	3_16						
		Comn	nent Cod	le					
	Inspector Comment								
The LMA o	completed	flood fight trai	ning in 2	014.					

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.27	Rating **	U	Issue No.		90		
LM End	0.27	Issue Type +	En	Location *				
Catagony	Category				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	WR UCIP Field Study			94°	39.593094	0	
пеш				-121.7035	70°	-121.703570	0	
DWR ID								

Comment Code

Inspector Comment

FS_ID:52178 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slope still dug away from around the pipe. Appears no repairs have been made to the pipe yet. (DWR Sutter Yard- AFreitag)11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-

AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as

last inspection.
FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/16/2017 10:01:44 AM

LM Start	0.27	Rating **	U	Issue No.	90 (cont)
LM End	0.27	Issue Type +	En	Location *	



Overview of the crossing.

Photo 2 of 3: UCIP_SP_2018_52178_66683.jpg



Air Vent located on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.27	Rating **	U	Issue No.		90 (cont)	
LM End	0.27	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category		Start		End		
Item	DWR UC	JCIP Field Study		39.59309	4 °	39.593094 °	
пеш				-121.70357	0 °	-121.703570 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52178 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slope still dug away from around the pipe. Appears no repairs have been made to the pipe yet. (DWR Sutter Yard- AFreitag)11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-

AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.

FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/16/2017 10:01:44 AM

Photo 3 of 3 : UCIP_SP_2018_52178_66681.jpg

Air vent and gate located in channel. Unable to determine if part of crossing.

LM Start	0.46	Rating **	М	Issue No.		89
LM End	0.46	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Item	Encroachments			39.591162°		39.591162°
Item			-121.701820 °		-121.701820 °	
DWR ID DWR_MA0013_01_s _ 2017_89						
Comment Code						

PR : Prunings

TX.TTurings

Inspector Comment

Remove the prunings from the landside slope.

Photo 1 of 1: SP_2018_MA0013_300_89_20180305_00013.jpg



View of prunings along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.50	Rating **	М	Issue No.		91	
LM End	0.50	Issue Type +	En	Location *			
Catagony	Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	DWR UCIP Field Study			88°	39.590968 °	
пеш	nem		-121.70124	° Ol	-121.701240 °		
DWR ID							

Inspector Comment

Comment Code

FS_ID:52179 DS_ID:16342 EP_NO: 12129

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/16/2016 Abandoned. WS end still has plate bolted on. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing still has plate bolted on it at the WS end and LS end was mostly buried.7/14/2015 WS pipe end still had plate bolted on it.5/21/2014 Same as last inspection.12/2/2013 Same as last

inspection.7/10/2013 Same as last inspection.4/12/2012 WS pipe

daylight has bolted plate.

FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel irrigation pipe through the levee, 2.4 feet below the crown. Steel plate bolted on the waterside (WS) end. (Permit No. 12129, 12129A, 1977 - John & Jerie Malina) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/16/2017 10:08:54 AM

LM Start	0.50	Rating **	М	Issue No.	91 (cont)
LM End	0.50	Issue Type +	En	Location *	





View of levee crown at crossing looking downstream at right bank of Cherokee Canal.

Photo 2 of 3: UCIP_SP_2018_52179_66684.jpg



WS-Bolted plate

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.50	Rating **	М	Issue No.		91 (cont)	
LM End	0.50	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	JCIP Field Study		39.59096	B°	39.590968 °	
пеш				-121.70124	o°	-121.701240 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52179 DS_ID:16342 EP_NO: 12129

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/16/2016 Abandoned. WS end still has plate bolted on. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing still has plate bolted on it at the WS end and LS end was mostly buried.7/14/2015 WS pipe end still had plate bolted on it.5/21/2014 Same as last inspection.12/2/2013 Same as last

inspection.7/10/2013 Same as last inspection.4/12/2012 WS pipe

daylight has bolted plate.

FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel irrigation pipe through the levee, 2.4 feet below the crown. Steel plate bolted on the waterside (WS) end. (Permit No. 12129, 12129A, 1977 - John & Jerie Malina) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/16/2017 10:08:54 AM

Photo 3 of 3 : UCIP_SP_	2018_52179_66685.jpg
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LS-Outlet

LM Start	0.63	Rating **	М	Issue No.	46	
LM End	0.63	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End	
ltom	Encroachments		39.58933	37°	39.589337°	
Item			-121.700604 °		-121.700604°	
DWR ID DWR_MA0013_01_f _ 2016_46						
Comment Code						

PR: Prunings

Inspector Comment

Remove the prunings from the landside toe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.63	Rating **	М	Issue No.		14		
LM End	1.17	Issue Type +	En	Location *		LS		
Category	Catagoria Earthen Levee				atitud	le/Longitude		
Calegory				Start		End		
Item	Encroach	ments		39.5892	72°	39.581472 °		
пеш				-121.7005	99°	-121.700518		
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_14							
		Comn	nent Cod	le				
DT : Ditch								
		Inspecto	or Comm	nent				

No Photos

LM Start	0.73	Rating **	М	Issue No.		12		
LM End	0.76	Issue Type +	En	Location *		LS		
Category Earthen Levee			GPS La	atitud	le/Longitude			
Category				Start		End		
Item	Encroach	ments		39.5879	05°	39.587505 °		
Item				-121.7008	22 °	-121.700880 °		
DWR ID	DWR_MA0	013_01_s _ 201	2_12					
		Comn	nent Cod	le				
EQ : Equip	ment							
Inspector Comment								
Remove the equipment from the landside toe.								



View of the equipment along the landside toe of the levee.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.13	Rating **	A/W	Issue No.		92
LM End	1.13	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.58214	7 °	39.582147°
пеш				-121.70054	o°	-121.700540°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52180 DS_ID:16343 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/14/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]

FS Date: 6/16/2017 10:11:43 AM

LM Start	1.13	Rating **	A/W	Issue No.	92 (cont)
LM End	1.13	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52180_66689.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_SP_2018_52180_66688.jpg



View of WS headwall and flap gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.13	Rating **	A/W	Issue No.		92 (cont)	
LM End	1.13	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	tituc	le/Longitude	
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.58214	7°	39.582147	0
пеш				-121.70054	° Ol	-121.700540	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52180 DS_ID:16343 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]

FS Date: 6/16/2017 10:11:43 AM

Photo 3 of 3: UCIP_SP_2018_52180_66687.jpg



View of WS with pipe in channel.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.59	Rating **	U	Issue No.	93	
LM End	1.59	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.57688	3°	39.576883°
пеш				-121.70277	°	-121.702770 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52182 DS_ID:16831 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard-AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)] FS Date: 6/16/2017 10:21:08 AM

Photo 1 of 3: UCIP_SP_2018_52182_66695.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.59	Rating **	U	Issue No.		93 (cont)
LM End	1.59	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.57688	3°	39.576883
пеш				-121.70277	0 °	-121.702770
DWR ID						

Inspector Comment

Comment Code

FS_ID:52182 DS_ID:16831 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard-AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)] FS Date: 6/16/2017 10:21:08 AM



Corrugated metal riser with slide gate located on WS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.59	Rating **	U	Issue No.	Issue No.		sue No. 93 (d	
LM End	1.59	Issue Type +	Ma	Location *				
Category	Supplemental Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.57688	3°	39.576883°		
пеш				-121.70277	o°	-121.702770 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:52182 DS_ID:16831 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard-AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)] FS Date: 6/16/2017 10:21:08 AM

Photo 3 of 3: UCIP_SP_2018_52182_66698.jpg



WS headwall, rock protection, and outlet blocked by shrub.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.66	Rating **	М	Issue No.		94
LM End	1.66	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		39.57581	3°	39.575816 °
пеш		-		-121.70290	o°	-121.702900 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52183 DS_ID:16345 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 PVC pipe still present blocking screw gate. LS inlet of the 24" cmp pipe is about 75% blocked by sediment. (DWR Sutter Yard- AFreitag)11/16/2016 PVC pipe still present blocking the screw gate. (DWR Sutter Yard- AFreitag)4/28/2016 Pvc pipe is still present through the crossing. Slide gate cannot shut fully.7/14/2015 4-inch pipe still present and blocking the screw gate.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete headwall on the landside (LS). 36-inch concrete standpipe in the channel with 2 piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.69)] FS Date: 6/16/2017 12:21:04 PM

LM Start	1.66	Rating **	М	Issue No.	94 (cont)
LM End	1.66	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_52183_66700.jpg



Overview of levee at crossing looking downstream.

Photo 2 of 3: UCIP_SP_2018_52183_66704.jpg



WS view looking upstream.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.66	Rating **	M	Issue No.		94 (cont)
LM End	1.66	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.5758	16°	39.575816 °
пеш				-121.7029	00°	-121.702900 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52183 DS_ID:16345 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 PVC pipe still present blocking screw gate. LS inlet of the 24" cmp pipe is about 75% blocked by sediment. (DWR Sutter Yard- AFreitag)11/16/2016 PVC pipe still present blocking the screw gate. (DWR Sutter Yard- AFreitag)4/28/2016 Pvc pipe is still present through the crossing. Slide gate cannot shut fully.7/14/2015 4-inch pipe still present and blocking the screw gate.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete headwall on the landside (LS). 36-inch concrete standpipe in the channel with 2 piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.69)] FS Date: 6/16/2017 12:21:04 PM



Positive closure device on WS slope, panel lid fell in.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.31	Rating **	М	Issue No.		95			
LM End	2.31	Issue Type +	En	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	IP Field Study		39.5664	33 °	39.566433 °			
пеш				-121.7037	50°	-121.703750 °			
DWR ID									

Comment Code

Inspector Comment

FS_ID:52184 DS_ID:16346 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Still no LS inlet visible- trace with locator/GPR to try and locate. Wooden debris down inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Appears abandoned. Unable to find anything on LS. (DWR Sutter Yard-AFreitag)4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried.7/14/2015 Still cannot find an inlet or outelt.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.35)]

FS Date: 6/16/2017 12:24:07 PM

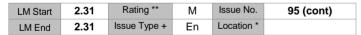


Photo 1 of 3: UCIP_SP_2018_52184_66708.jpg



Overview of crossing looking DS.

Photo 2 of 3: UCIP_SP_2018_52184_66709.jpg



Corrugated riser located on WS slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.31	Rating **	М	Issue No.		95 (cont)
LM End	2.31	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.56643	3°	39.566433 °
пеш		-		-121.70375	o°	-121.703750 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52184 DS_ID:16346 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Still no LS inlet visible- trace with locator/GPR to try and locate. Wooden debris down inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Appears abandoned. Unable to find anything on LS. (DWR Sutter Yard-AFreitag)4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried.7/14/2015 Still cannot find an inlet or outelt.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.35)]

FS Date: 6/16/2017 12:24:07 PM



Corrugated metal riser on WS slope. Lid panel blocking gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.		96	
LM End	2.70	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.5611	30°	39.561130	0
пеш				-121.7051	40 °	-121.705140	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52185 DS_ID:16347 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]

FS Date: 6/16/2017 12:27:02 PM

LM Start	2.70	Rating **	A/W	Issue No.	96 (cont)
LM End	2.70	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52185_66715.jpg



Overview of levee crown looking downstream at crossing.

Photo 2 of 3: UCIP_SP_2018_52185_66714.jpg



Flap gate at WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.		96 (cont)	
LM End	2.70	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	ituc	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.56113	0 °	39.561130	0
пеш				-121.70514	0°	-121.705140	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52185 DS_ID:16347 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]

FS Date: 6/16/2017 12:27:02 PM

Photo 3 of 3 : UCIP_SP_2018_52185_66711.jpg

View of channel.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		97
LM End	3.05	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.55631	0°	39.556310°
пеш				-121.70647	0 °	-121.706470 °
DWR ID						

Comment Code Inspector Comment

FS_ID:52186 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM

Photo 1 of 3: UCIP_SP_2018_52186_66718.jpg



Overview of levee crown looking downstream at crossing.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		97 (cont)
LM End	3.05	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.55631	0 °	39.556310 °
пеш				-121.70647	o°	-121.706470 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52186 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM

Photo 2 of 3: UCIP_SP_2018_52186_66716.jpg



WS levee slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		97 (cont)
LM End	3.05	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.55631	0 °	39.556310 °
пеш				-121.70647	o°	-121.706470 °
DWR ID						

Comment Code

Inspector Comment

FS ID:52186 DS_ID:17372 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM

Photo 3 of 3: UCIP_SP_2018_52186_66720.jpg



Flap gate on waterside.

MA0013

Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		98
LM End	3.05	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.55627	6°	39.556276
пеш				-121.70651	0 °	-121.706510 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52187 DS_ID:16348 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/14/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/16/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/28/2016 Unable to locate.7/14/2015 Unable to locate.5/21/2014 Same as last inspection.12/2/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate.4/18/2012 Crossing not visible during the Spring 2012 Inspection. Attempt to find crossing during next inspection when slopes are cleared of vegetation.

FIELD_STRUCT_DESC: 24-inch drainage pipe through the levee at an unknown depth below the crown. Concrete headwall on both waterside

(WS) and landside (LS) ends. Flap gate located on the WS end.

[Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/16/2017 12:30:01 PM

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.24	Rating **	М	Issue No.		99
LM End	3.24	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Category				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.55349	o°	39.553490°
item				-121.706680	°	-121.706680 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52188 DS_ID:16349 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

LM Start	3.24	Rating **	М	Issue No.	99 (cont)
LM End	3.24	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52188_66725.jpg



Overview of levee crown looking DS at crossing.

Photo 2 of 3: UCIP SP 2018 52188 66724.jpg



Flap gate on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.24	Rating **	М	Issue No.		99 (cont)
LM End	3.24	Issue Type +	Ma	Location *		
Catagony	Suppleme	ental		GPS Lat	tud	e/Longitude
Category				Start		End
Itom	DWR UC	IP LMA Respo	onsibility	39.55349	o°	39.553490 °
Item				-121.70668	°	-121.706680 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52188 DS_ID:16349 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional 4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

Photo 3 of 3: UCIP_SP_2018_52188_66726.jpg



Recent sediment removal on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.		100
LM End	3.27	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
ltom	DWR UC	IP LMA Respo	onsibility	39.55312	9°	39.553129°
Item				-121.70664	°	-121.706640 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52189 DS_ID:16350 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dud out. Pipe has been selected to be internally cleaned and

inspected as part of the DMP project. (DWR Sutter Yard-

AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)] FS Date: 6/16/2017 12:32:19 PM

LM Start	3.27	Rating **	A/W	Issue No.	100 (cont)
LM End	3.27	Issue Type +	Ma	Location *	



Overview of levee crown at crossing.

Photo 2 of 3: UCIP_SP_2018_52189_66730.jpg



View of WS flap gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.		100 (cont)	
LM End	3.27	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	tud	e/Longitude	
Calegory				Start		End	
Itom	DWR UC	IP LMA Respo	nsibility	39.55312	9°	39.553129	0
Item				-121.70664	°	-121.706640	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52189 DS_ID:16350 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dug out. Pipe has been selected to be internally cleaned and

inspected as part of the DMP project. (DWR Sutter Yard-

AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)]

FS Date: 6/16/2017 12:32:19 PM

Photo 3 of 3 : UCIP_SP	_2018_52189_66732.jpg
	Market 1
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Sedimentation cleared on WS.

LM Start	3.69	Rating **	A/W	Issue No.		78		
LM End		Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item	2017 Storm Damage			39.54702	20°	39.553445 °	>	
item				-121.70762	22°	-121.707510 °	>	
DWR ID	DWR_MA0	013_01_f _ 201	7_78					
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:4

Site Designation:108-5 Repair Type: Other Rating:Area of Concern Field Date: 6/8/2017

Notes: There was no issue here, may have been wrong GPS location. Shawn Fritag, the supervisor, said there were no issues along this stretch of levee

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.70	Rating **	A/W	Issue No.		79		
LM End		Issue Type +	Ma	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category					End		
ltom	2017 Stor	m Damage		39.54688	4 °		0	
Item				-121.70760	5 °		0	
DWR ID	DWR ID DWR_MA0013_01_f _ 2017_79							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:238

Site Designation:LMA-41 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: There was no issue here, may have been wrong GPS location. Shawn Fritag, the supervisor, said there were no issues along this stretch of levee.

No Photos

LM Start	3.71	Rating **	М	Issue No.		76				
LM End	18.50	Issue Type +	Ма	Location *		WS				
Category	Category Earthen Levee								itud	e/Longitude
Calegory				Start		End				
Item	Vegetatio	n		39.54673	8°	39.373430 °				
пеш			-121.70760	o°	-121.850527 °					
DWR ID DWR_MA0013_01_s _ 2018_76										
	Comment Code									

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Remove the native vegetation from the waterside slope.

Photo 1 of 1 : SP_2018_MA0013_300_76_20180425_00145.jpg



View of the native grasses along the waterside slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.71	Rating **	М	Issue No.		77		
LM End	15.75	Issue Type +	Ма	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Vegetatio		39.546727°		39.398780°			
item			-121.707600 °		-121.810932 °			
DWR ID	DWR_MA0	013_01_s _ 201	8_77					
		Comn	nent Coo	le				
V1 : Control annual grass and weeds on the levee slopes and easements.								
Inspector Comment								
Remove th	Remove the native vegetation from the landside slope.							

Photo 1 of 1 : SP_2018_MA0013_300_77_20180425_00146.jpg

View of the native vegetation along the landside slope.

LM Start	3.72	Rating **	A/W	Issue No.		101
LM End	3.72	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory		Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.54659)2°	39.546592 °
item				-121.70756	60°	-121.707560 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52190 DS_ID:16351 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM

Photo 1 of 3: UCIP_SP_2018_52190_66736.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.72	Rating **	A/W	Issue No.		101 (cont)	
LM End	3.72	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory						End	
Item	DWR UC	IP LMA Respo	onsibility	39.54659	2°	39.546592 °	
пеш				-121.70756	o°	-121.707560 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52190 DS_ID:16351 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM

LM Start	3.72	Rating **	A/W	Issue No.	101 (cont)
LM End	3.72	Issue Type +	Ma	Location *	



WS slope covered by dense vegetation.

Photo 3 of 3: UCIP_SP_2018_52190_66735.jpg



WS flap gate

Location Rating Issue Type LS : Land Side Ma: Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.73	Rating **	М	Issue No.		51			
LM End	3.73	Issue Type +	En	Location *		LS			
Catagony	Category Earthen Levee					GPS Latitude/Longitude			
Calegory			Start		End				
Item	Encroachments				65°	39.546465	٥		
пеш			-121.707530 °		-121.707530	٥			
DWR ID	DWR_MA0	013_01_s _ 201	6_51						
		Comn	nent Cod	le					
EQ : Equip	ment								
		Inspecto	or Comm	nent					
Remove ag equipment from the toe of slope.									

No Photos

LM Start	3.74	Rating **	М	Issue No.		102
LM End	3.74	Issue Type +	Ma	Location *		
Category	ental	GPS La	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.5463	17°	39.546317°
пеш				-121.7075	10°	-121.707510 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52191 DS_ID:16365 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard-AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried. 7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 6/16/2017 12:35:50 PM

Photo 1 of 3: UCIP_SP_2018_52191_66743.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.74	Rating **	М	Issue No.		102 (cont)
LM End	3.74	Issue Type +	Ma	Location *		
Category	ental	GPS Lat	GPS Latitude/Longitude			
Calegory		Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.54631	7°	39.546317°
Item				-121.70751	0 °	-121.707510°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52191 DS_ID:16365 EP_NO: N/A

LM End

3.74

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard-AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 6/16/2017 12:35:50 PM

Ма

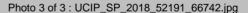
Location *

LM Start 3.74 Rating ** M Issue No. 102 (cont)

Issue Type +



WS flap gate blocked by debris.





LS slide gate covered with silt. Slide gate is bent.

Location Rating Issue Type LS : Land Side N/A: Not Applicable Ma: Maintenance Deficiency N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.80	Rating **	A/W	Issue No.	80		
LM End		Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Category				Start		End	
Item	2017 Stor	m Damage		39.54544	6°		0
пеш			-121.70737	8°		0	
DWR ID	DWR ID DWR_MA0013_01_f _ 2017_80						
		Comn	nent Cod	le			

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:239

Site Designation:LMA-42 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: There was no issue here, may have been wrong GPS location. Shawn Fritag, the supervisor, said there were no issues along this

stretch of levee

LM Start	3.90	Rating **	A/W	Issue No.		81	
LM End		Issue Type +	Ma	Location *			
Category	Supplemental			GPS Lat	tituc	le/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		39.54399	6°		0
Item				-121.70737	'8°		0
DWR ID	DWR_MA0	013_01_f _ 201	7_81				
		Comn	nent Cod	le			

Inspector Comment

Levee Evaluation Comments

Description:

Site ID No:240

Site Designation:LMA-43

Repair Type: Erosion

Rating:Area of Concern

Field Date:6/8/2017

Notes: There was no issue here, may have been wrong GPS location. Shawn Fritag, the supervisor, said there were no issues along this

stretch of levee

No Photos

No Photos

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.00	Rating **	A/W	Issue No.	Issue No. 82		
LM End		Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	2017 Stor	m Damage		39.54254	7 0		0
пеш				-121.70738	S°		0
DWR ID	DWR_MA0	013_01_f _ 201	7_82				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:241

Site Designation:LMA-44 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: There was no issue here, may have been wrong GPS location. Shawn Fritag, the supervisor, said there were no issues along this stretch of levee.

Photo 1 of 1: SP	2018	MACC13	300 18	20180305	00005 ina
FIIULU I UI I . SF	2010	MADDIS	300 10	20100303	00005.jpg

No Photos



View of the redwood trees along the landside slope.

LM Start	4.06	Rating **	М	Issue No.		18		
LM End	4.13	Issue Type +	En	Location *		LS		
Category	Category Earthen Levee				atitud	e/Longitude		
Category				Start		End		
Item	Vegetation	n		39.5416	60°	39.540651 °		
Item				-121.7074	08 °	-121.707404 °		
DWR ID	DWR_MA0	013_01_s _ 201	3_18					
		Comn	nent Cod	le				
V6 : Lands	scaping							
		Inspecto	or Comm	nent				

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.10	Rating **	A/W	Issue No.	83		
LM End		Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Storm Damage			39.54109	7°		0
пеш	item				2 °		0
DWR ID	DWR ID DWR_MA0013_01_f _ 2017_83						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:242

Site Designation:LMA-45 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: There was no issue here, may have been wrong GPS location. Shawn Fritag, the supervisor, said there were no issues along this

stretch of levee.

LM Start	4.30	Rating **	A/W	Issue No.		84	
LM End		Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude	
Category				Start		End	
Item	2017 Storm Damage			39.53819	8 °		0
пеш		-121.70744	2 °		0		
DWR ID DWR_MA0013_01_f _ 2017_84							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:

Site ID No:243

Site Designation:LMA-46

Repair Type: Erosion

Rating: Area of Concern

Field Date:6/8/2017

Notes: There was no issue here, may have been wrong GPS location. Shawn Fritag, the supervisor, said there were no issues along this stretch of levee.

No Photos

No Photos

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.35	Rating **	A/W	Issue No.		103
LM End	4.35	Issue Type +	Ma	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.53751	o°	39.537516°
nem				-121.707580	°	-121.707580 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52193 DS_ID:16341 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM

LM Start	4.35	Rating **	A/W	Issue No.	103 (cont)
LM End	4.35	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52193_66752.jpg



Overview of levee crown at crossing looking upstream.

Photo 2 of 3: UCIP_SP_2018_52193_66753.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.35	Rating **	A/W	Issue No.		103 (cont)	
LM End	4.35	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.5375	16°	39.537516°	
пеш				-121.70758	30°	-121.707580 °	
DWR ID							

Inspector Comment

Comment Code

FS ID:52193 DS_ID:16341 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM

Photo 3 of 3: UCIP_SP_2018_52193_66750.jpg



View of WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.		104
LM End	4.85	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.53022	20°	39.530220 °
item				-121.70794	0 °	-121.707940 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52194 DS_ID:16355 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)] FS Date: 6/16/2017 12:55:37 PM

LM Start	4.85	Rating **	A/W	Issue No.	104 (cont)
LM End	4.85	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52194_66756.jpg



Overview of levee crown at crossing looking downstream at righ bank of Cherokee Canal.

Photo 2 of 3: UCIP_SP_2018_52194_66758.jpg



Burrow activity on WS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.		104 (cont)			
LM End	4.85	Issue Type +	Ма	Location *					
Category	Supplemental			Supplemental			GPS Lat	itud	e/Longitude
Calegory				Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.53022	0 °	39.530220°			
пеш				-121.70794	o°	-121.707940°			
DWR ID									

Comment Code

Inspector Comment

FS_ID:52194 DS_ID:16355 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)]

FS Date: 6/16/2017 12:55:37 PM

Photo 3 of 3: UCIP_SP_2018_52194_66755.jpg



View of WS flap gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.		105
LM End	5.33	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.52323	36°	39.523236°
item				-121.7076	50 °	-121.707650°
DWR ID						

Inspector Comment

Comment Code

FS_ID:52195 DS_ID:16356 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears

to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gates. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)]

FS Date: 6/16/2017 1:04:28 PM

LM Start	5.33	Rating **	A/W	Issue No.	105 (cont)
I M End	5.33	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52195_66762.jpg



Overview of levee crown at crossing looking D/S on right bank of Cherokee Canal.

Photo 2 of 3: UCIP_SP_2018_52195_66760.jpg



WS Flap Gate

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.		105 (cont)	
LM End	5.33	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.52323	6°	39.523236	0
пеш				-121.70765	o°	-121.707650	0
DWR ID							

Comment Code

Inspector Comment

FS ID:52195 DS_ID:16356 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears

to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gates. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)]

FS Date: 6/16/2017 1:04:28 PM

Photo 3 of 3: UCIP_SP_2018_52195_66763.jpg



WS view of outlet cleared of vegetation.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.38	Rating **	М	Issue No.		106	
LM End	5.38	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.5225	66°	39.522566	0
пеш				-121.7075	60°	-121.707560	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52196 DS_ID:16357 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.48)]

FS Date: 6/16/2017 1:05:09 PM

LM Start	5.38	Rating **	М	Issue No.	106 (cont)
LM End	5.38	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52196_66764.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP SP 2018 52196 66765.jpg



View of WS slope and channel.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.38	Rating **	М	Issue No.		106 (cont)	
LM End	5.38	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.5225	66°	39.522566	٥
пеш				-121.7075	60°	-121.707560	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52196 DS_ID:16357 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.48)] FS Date: 6/16/2017 1:05:09 PM

Photo 3 of 3: UCIP_SP_2018_52196_66768.jpg



View of WS flap gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.63	Rating **	М	Issue No.		107
LM End	5.63	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Lat	le/Longitude		
Calegory						End
Item	DWR UCI	P LMA Respo	onsibility	39.51921	2°	39.519212°
пеш				-121.70903	°	-121.709030 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52201 DS_ID:16359 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried- needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13D_2011_p_0210 for WS gate submerged.

USACE_CESPK_M13D_2011_p_0210 for WS gate submerged. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.73)]

Ма

Location '

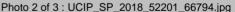
Issue Type +

5.63

LM End



Overview of levee crown at crossing looking downstream.





View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.63	Rating **	М	Issue No.		107 (cont)
LM End	5.63	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Latitude/I			
Calegory						End
Item	DWR UC	IP LMA Respo	onsibility	39.51921	2°	39.519212 °
Item				-121.70903	°	-121.709030 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52201 DS_ID:16359 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried- needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13D_2011_p_0210 for WS gate submerged. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.73)] FS Date: 6/16/2017 1:29:37 PM

Photo 3 of 3: UCIP_SP_2018_52201_66791.jpg



View of WS flap gate buried.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.		108
LM End	5.87	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.51605	9°	39.516059°
пеш				-121.71081	°	-121.710810 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52202 DS_ID:16360 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM

LM Start	5.87	Rating **	A/W	Issue No.	108 (cont)
LM End	5.87	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52202_66800.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_SP_2018_52202_66801.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.		108 (cont)
LM End	5.87	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory	ory			Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.51605	9°	39.516059°
пеш				-121.71081	o°	-121.710810 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52202 DS_ID:16360 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM



Flap gate WS

LM Start	6.17	Rating **	М	Issue No.		67	
LM End	6.17	Issue Type +	En	Location *		LS	
Category	gory Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Encroachments			39.512157°		39.512157°		
item					71 °	-121.713171 °	
DWR ID	DWR ID DWR_MA0013_01_f _ 2016_67						
Comment Code							
DT : Ditch							

Inspector Comment

No Photos

ı	Location	
I	LS : Land Side WS : Water Side	N/A: Not Applicable
I	WS: Water Side	
ı	00 - 0	

* Location

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.23	Rating **	М	Issue No.		109
LM End	6.23	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.5113	37°	39.511337°
пеш				-121.7136	20°	-121.713620°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52203 DS_ID:16361 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM

LM Start	6.23	Rating **	М	Issue No.	109 (cont)
LM End	6.23	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52203_66808.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_SP_2018_52203_66806.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.23	Rating **	М	Issue No.		109 (cont)
LM End	6.23	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.51133	7 °	39.511337°
пеш				-121.71362	o°	-121.713620°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52203 DS_ID:16361 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM

Photo 3 of 3 : UCIP_SP_2018_52203_66804.jpg

View of WS flap gate.

LM Start	6.41	Rating **	М	Issue No.		3		
LM End	6.99	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachments			39.508928°		39.501438 °		
item				-121.7148	42 °	-121.719715°		
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_3							
Comment Code								
DT : Ditch								

Inspector Comment



Photo 1 of 1: SP_2018_MA0013_300_3_20180305_00001.jpg

View of the agricultural ditch along the toe.

* Location	
LS : Land Side	N/A: Not Applicable
WS: Water Side	
CR · Crown	

* Rating

A: Acceptable

M: Minimally Acceptable

U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.45	Rating **	A/W	Issue No.		110	
LM End	6.45	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility		39.50830	9°	39.508309°		
пеш				-121.71510	°	-121.715100 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52204 DS_ID:16362 EP_NO: 5200B

Repair Type: No Action Needed Crossing Status: Found

Manual 519, June 1962 (HLM 6.56)] FS Date: 6/19/2017 8:55:42 AM

UCIP Comments: 6/14/2017 Hole/erosion behind the flashboards was repaired. New flash boards were installed and the erosion hole filled back in. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Hole/erosion still present behind the LS flashboards. (DWR Sutter Yard-AFreitag)4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition. (DWR Sutter Yard afreitag)7/13/2015 Hole still present behind the LS flashboards. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS. (DWR Sutter Yard - afreitag)4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on

both ends (Permit No. 5200B - 1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M

Photo 1 of 3: UCIP_SP_2018_52204_66814.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.45	Rating **	A/W	Issue No.		110 (cont)
LM End	6.45	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.50830)9°	39.508309°
пеш				-121.71510	00°	-121.715100 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52204 DS_ID:16362 EP_NO: 5200B

Repair Type: No Action Needed Crossing Status: Found

Manual 519, June 1962 (HLM 6.56)] FS Date: 6/19/2017 8:55:42 AM

UCIP Comments: 6/14/2017 Hole/erosion behind the flashboards was repaired. New flash boards were installed and the erosion hole filled back in. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Hole/erosion still present behind the LS flashboards. (DWR Sutter Yard-AFreitag)4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition. (DWR Sutter Yard afreitag)7/13/2015 Hole still present behind the LS flashboards. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS. (DWR Sutter Yard - afreitag)4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on

both ends (Permit No. 5200B - 1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M

Photo 2 of 3: UCIP_SP_2018_52204_66813.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.45	Rating **	A/W	Issue No.		110 (cont)
LM End	6.45	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.50830)9°	39.508309°
пеш				-121.71510	00°	-121.715100 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52204 DS_ID:16362 EP_NO: 5200B

Repair Type: No Action Needed Crossing Status: Found

Manual 519, June 1962 (HLM 6.56)] FS Date: 6/19/2017 8:55:42 AM

UCIP Comments: 6/14/2017 Hole/erosion behind the flashboards was repaired. New flash boards were installed and the erosion hole filled back in. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Hole/erosion still present behind the LS flashboards. (DWR Sutter Yard-AFreitag)4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition. (DWR Sutter Yard afreitag)7/13/2015 Hole still present behind the LS flashboards. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS. (DWR Sutter Yard - afreitag)4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside

(WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (Permit No. 5200B - 1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M



WS flap gate.

Location Rating Issue Type LS: Land Side N/A: Not Applicable Ma: Maintenance Deficiency N: Not Inspected/Rated A: Acceptable Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		111	
LM End	6.99	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	UCIP LMA Responsibility		39.50147	9°	39.501479°	
пеш				-121.71971	°	-121.719710 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52211 DS_ID:16329 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM

LM Start	6.99	Rating **	М	Issue No.	111 (cont)
LM End	6.99	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52211_66833.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_SP_2018_52211_66832.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		111 (cont)
LM End	6.99	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.50147	°	39.501479°
пеш				-121.71971	°	-121.719710°
DWR ID						

Comment Code

Inspector Comment

FS ID:52211 DS_ID:16329 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM





WS Flap Gate

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		112		
LM End	7.22	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start End				
Item	DWR UC	IP LMA Respo	onsibility	39.4988	45 °	39.498845°		
пеш				-121.7224	40 °	-121.722440 °		
DWR ID	RID							
Comment Code								

Inspector Comment

FS_ID:52212 DS_ID:16354 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 1 of 3: UCIP_SP_2018_52212_66844.jpg



Overview of levee crown at crossing looking D/S.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		112 (cont)	
LM End	7.22	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.49884	5°	39.498845	0
пеш				-121.72244	°	-121.722440	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52212 DS_ID:16354 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 2 of 3: UCIP_SP_2018_52212_66845.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		112 (cont)	
LM End	7.22	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.49884	5°	39.498845°	
пеш				-121.72244	o°	-121.722440 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52212 DS_ID:16354 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 3 of 3: UCIP_SP_2018_52212_66842.jpg



WS Flap Gate

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.		113	
LM End	7.46	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.49614	6°	39.496146°	
пеш				-121.72516	o°	-121.725160°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52213 DS_ID:16352 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM

LM Start	7.46	Rating **	A/W	Issue No.	113 (cont)
LM End	7.46	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52213_66853.jpg



View of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP SP 2018 52213 66851.jpg



WS view of slope and channel.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.		113 (cont)	
LM End	7.46	Issue Type +	Ма	Location *			
Category	Suppleme	upplemental			GPS Latitude/Longitud		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.49614	3°	39.496146°	
пеш				-121.72516	°	-121.725160°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52213 DS_ID:16352 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM

Photo 3 of 3: UCIP_SP_2018_52213_66849.jpg



View of WS flap gate. Dense vegetation on WS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.64	Rating **	A/W	Issue No.		114
LM End	7.64	Issue Type +	Ma	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.49375	3°	39.493756°
пеш				-121.726570	°	-121.726570 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52217 DS_ID:16320 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.76)]

FS Date: 6/19/2017 12:43:02 PM

 LM Start
 7.64
 Rating **
 A/W
 Issue No.
 114 (cont)

 LM End
 7.64
 Issue Type +
 Ma
 Location *

Photo 1 of 3 : UCIP_SP_2018_52217_66867.jpg



Overview of levee crown at crossing (past gate) looking D/S.

Photo 2 of 3: UCIP_SP_2018_52217_66865.jpg



View of WS slope, corrugated metal riser with slide gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.64	Rating **	A/W	Issue No.		114 (cont)
LM End	7.64	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	egory			Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.49375	6°	39.493756°
пеш				-121.72657	o°	-121.726570 °
DWR ID						

Comment Code

Inspector Comment

FS ID:52217 DS_ID:16320 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.76)]

FS Date: 6/19/2017 12:43:02 PM



WS Slide gate

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.00	Rating **	A/W	Issue No.		115	
LM End	8.00	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.48906	61 °	39.489061	0
пеш				-121.72943	30°	-121.729430	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52218 DS_ID:16321 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 Crossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM

LM Start	8.00	Rating **	A/W	Issue No.	115 (cont)
LM End	8.00	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52218_66872.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_SP_2018_52218_66873.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.00	Rating **	A/W	Issue No.		115 (cont)
LM End	8.00	Issue Type +	Ma	Location *		
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.48906	1°	39.489061 °
пеш				-121.729430	°	-121.729430 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52218 DS_ID:16321 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

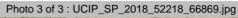
AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 Crossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM





WS Flap gate

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		116
LM End	8.27	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory		Start		End		
Item	DWR UCIP LMA Responsibility			39.4854	32°	39.485432 °
пеш				-121.7315	90°	-121.731590°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52219 DS_ID:16322 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM

LM Start	8.27	Rating **	М	Issue No.	116 (cont)
LM End	8.27	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52219_66876.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_SP_2018_52219_66874.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		116 (cont)	
LM End	8.27	Issue Type +	Ma	Location *			
Catagony	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.48543	2°	39.485432 °	
пеш				-121.731590	°	-121.731590°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52219 DS_ID:16322 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM

Photo 3 of 3: UCIP_SP_2018_52219_66877.jpg



View of WS flap gate and headwall.

LM Start	8.81	Rating **	М	Issue No.		49		
LM End	8.81	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	Erosion /	Bank Caving		39.478648°		39.478648 °		
пеш				-121.7364	77 °	-121.736477 °		
DWR ID	DWR ID DWR_MA0013_01_f _ 2016_49							
Comment Code								
E2 : Schedule repair of erosion site prior to the next inspection.								

Inspector Comment

Photo 1 of 1: SP_2018_MA0013_300_49_20180305_00007.jpg



View of the erosion site along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		117	
LM End	8.82	Issue Type +	En	Location *			
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		39.47857	3°	39.478573°	
пеш				-121.73655	°	-121.736550°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52220 DS_ID:16323 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS underwater but levee erosion is still present- needs to be repaired. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 LS erosion is still a major problem here. (DWR Sutter Yard- AFreitag)4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - afreitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.95)]

FS Date: 6/19/2017 12:50:55 PM

LM Start	8.82	Rating **	U	Issue No.	117 (cont)
LM End	8.82	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_52220_66881.jpg



Catwalk and screw gate located on WS.

Photo 2 of 3: UCIP_SP_2018_52220_66884.jpg



Catwalk & gate located on WS. No daylight point on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		117 (cont)	
LM End	8.82	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		39.47857	3°	39.478573°	
пеш				-121.73655	o°	-121.736550 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52220 DS_ID:16323 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS underwater but levee erosion is still present- needs to be repaired. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 LS erosion is still a major problem here. (DWR Sutter Yard- AFreitag)4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - afreitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.95)]

FS Date: 6/19/2017 12:50:55 PM

Photo 3 of 3: UCIP_SP_2018_52220_66882.jpg



View of LS structure. Erosion present behind headwall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.84	Rating **	М	Issue No.		118		
LM End	8.84	Issue Type +	Ma	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCIP LMA Responsibility			39.47828	31°	39.478281 °		
пеш				-121.73678	80°	-121.736780 °		
DWR ID								

Inspector Comment

Comment Code

FS_ID:52223 DS_ID:16325 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No

noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense

vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope.

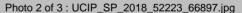
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM

LM Start	8.84	Rating **	М	Issue No.	118 (cont)
LM End	8.84	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.





View of WS slope with 2 slide gates.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.84	Rating **	М	Issue No.	118 (cont)			
LM End	8.84	Issue Type +	Ма	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UC	DWR UCIP LMA Responsibility			°	39.478281 °		
пеш				-121.736780	°	-121.736780 °		
DWR ID								

Inspector Comment

Comment Code

FS_ID:52223 DS_ID:16325 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM



View of slide gate on WS. Debris blocking gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.89	Rating **	М	Issue No.		119	
LM End	8.89	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP Field Study			39.4775	88°	39.477588 °	
пеш				-121.7370	40 °	-121.737040 °	
DWR ID							

Inspector Comment

Comment Code

FS_ID:52225 DS_ID:16828 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Erosion still present on the side of the LS structure- still not affecting levee yet. (DWR Sutter Yard-AFreitag)11/16/2016 Some erosion still present near the LS structure. Does not affect the levee yet. (DWR Sutter Yard-AFreitag)4/28/2016 Erosion happening around the concrete structure on LS. Its not yet affecting the levee but will keep monitoring.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.12/3/2013 Same as

last inspection.4/18/2012 Crossing is not visible on WS. FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtenances include concrete pipe siphon, screw gate, and distribution box visible on the landside (LS). No appurtenances found on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 9.02)]

FS Date: 6/19/2017 1:05:30 PM

LM Start	8.89	Rating **	М	Issue No.	119 (cont)
LM End	8.89	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_52225_66908.jpg



Overview picture looking south

Photo 2 of 3: UCIP_SP_2018_52225_66907.jpg



Headwall at LS distribution box

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.89	Rating **	М	Issue No.		119 (cont)		
LM End	8.89	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item	DWR UCI	DWR UCIP Field Study			88°	39.477588 °		
item		-121.7370	40 °	-121.737040 °				
DWR ID								

Comment Code

Inspector Comment

FS_ID:52225 DS_ID:16828 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Erosion still present on the side of the LS structure- still not affecting levee yet. (DWR Sutter Yard-

AFreitag)11/16/2016 Some erosion still present near the LS structure. Does not affect the levee yet. (DWR Sutter Yard-

AFreitag)4/28/2016 Erosion happening around the concrete structure on LS. Its not yet affecting the levee but will keep

monitoring.7/13/2015 Crossing appears in good condition. No

noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

last inspection.4/18/2012 Crossing is not visible on WS.

FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtenances include concrete pipe siphon, screw gate, and distribution box visible on the landside (LS). No appurtenances found on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.02)] FS Date: 6/19/2017 1:05:30 PM

Photo 3 of 3: UCIP_SP_2018_52225_76257.jpg



Enter photo 3 description or comment here.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.90	Rating **	М	Issue No.		120	
LM End	8.90	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP Field Study			39.47753	o°	39.477530	0
пеш				-121.73706	°	-121.737060	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52226 DS_ID:16328 EP_NO: 1234A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/14/2017 WS marker missing. (DWR Sutter Yard-AFreitag)11/16/2016 WS marker is knocked over and laying on the ground. (DWR Sutter Yard-AFreitag)4/28/2016 Marker missing on WS.7/13/2015 Crossing appears in good condition. No noticeable issues to report.Need to contact owner to replace marker.7/15/2013 Same as last inspection.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: Underground telephone cable through the levee at an unknown depth below the crown. (Permit No. 1234, 1234A, 1947 - Pacific Telephone and Telegraph Company [PT&T]) [Additional

Reference(s): DWR Levee Log, 1993] FS Date: 6/19/2017 1:08:10 PM



Underground telephone cable marker located on WS.

LM Start	8.92	Rating **	М	Issue No.		65	
LM End	9.33	Issue Type +	En	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
ltem Encroachments			39.4772	45 °	39.471975 °		
				-121.7372	53 °	-121.740795 °	
DWR ID	DWR ID DWR_MA0013_01_f _ 2016_65						
Comment Code							
FE : Fence							
Inspector Comment							

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.		121
LM End	8.95	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.4768	39°	39.476839°
пеш				-121.7375	40 °	-121.737540 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52227 DS_ID:16317 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

FS Date: 6/19/2017 1:09:21 PM

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 9.09)]

LM Start	8.95	Rating **	A/W	Issue No.	121 (cont)
LM End	8.95	Issue Type +	Ма	Location *	



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_SP_2018_52227_66911.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.		121 (cont)	
LM End	8.95	Issue Type +	Ма	Location *			
Category				GPS Lat	itud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.47683	9°	39.476839	0
пеш				-121.73754	0°	-121.737540	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52227 DS_ID:16317 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016. Crossing appears to be in good

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.09)] FS Date: 6/19/2017 1:09:21 PM

Photo 3 of 3: UCIP_SP_2018_52227_66912.jpg



View of LS slope and toe.

LM Start	9.70	Rating **	М	Issue No.		5
LM End	9.72	Issue Type +	Ма	Location *		LS
Category	Catagoria Earthen Levee			GPS La	titud	e/Longitude
Category	Calegory					End
Item	Trim / Thi	n Trees		39.46717	'0 °	39.466860 °
item				-121.74388	87 °	-121.744108°
DWR ID	DWR_MA0	013_01_s _ 201	2_5			

Comment Code

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



View of the overgrown trees along the landside slope and toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.73	Rating **	М	Issue No.		10		
LM End	9.75	Issue Type +	En	Location *		LS		
Category Earthen Levee								
Calegory			Start		End			
Item	Encroachments			39.4667	32 °	39.466478 °		
пеш	item				80°	-121.744338°		
DWR ID DWR_MA0013_01_f _ 2013_10								
		Comn	nent Cod	le				
MA : Mater	rial							
		Inspecto	or Comm	nent				
Move the trailer and materials outside the 10 foot easement.								



View of a trailer and material along the landside toe.

LM Start	9.75	Rating **	М	Issue No.		64		
LM End	9.75	Issue Type +	Ма	Location *		LS		
Catagoria Earthen Levee			GPS Latitude/Longitude					
Category				Start		End		
Item	Trim / Thi	n Trees		39.466478 °		39.466478 °		
item				-121.7443	38°	-121.744338°		
DWR ID	DWR_MA0	013_01_f _ 201	6_64					
Comment Code								
T1 : Trim trees to at least five feet above ground level.								

Inspector Comment

No Photos

		D-+: **		Issue No.		
LM Start	9.90	Rating **	М	issue ivo.		63
LM End	9.90	Issue Type +	En	Location *		LS
Category	Earthen L	.evee		GPS L	atitud	e/Longitude
Calegory	legory					End
Encroachments ltem				39.4645	27°	39.464527 °
пеш				-121.745568 °		-121.745568 °
DWR ID	DWR_MAG	013_01_f _ 201	6_63			
		Comn	nent Cod	de		
FE : Fence	Э					
		Inspecto	or Comm	nent		

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	11.03	Rating **	A/W	Issue No.		122
LM End	11.03	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory	Category			Start		End
Item	DWR UC	IP LMA Respo	39.44988	o°	39.449886 °	
item				-121.75505	°	-121.755050 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52232 DS_ID:16332 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)]

FS Date: 6/19/2017 1:17:54 PM

LM Start	11.03	Rating **	A/W	Issue No.	122 (cont)
LM End	11.03	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52232_66926.jpg



View of WS corrugated metal riser and concrete wall.

Photo 2 of 3: UCIP_SP_2018_52232_66925.jpg



Corrugated metal riser with owner information.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	11.03	Rating **	A/W	Issue No.	122 (cont)	
LM End	11.03	Issue Type +	Ma	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.44988	6°	39.449886 °
item				-121.75505	o°	-121.755050 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52232 DS_ID:16332 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)]

FS Date: 6/19/2017 1:17:54 PM



Trash rack on WS headwall.

LM Start	11.58	Rating **	M	Issue No.		4		
LM End	11.59	Issue Type +	Ma	Location *	WS			
Category	Suppleme	GPS Latitude/Longitude						
Calegory				Start		End		
Item		CE Erosion S	Survey,	39.44282	1°	39.442738	0	
item	DRAFT	-121.75985	1 °	-121.759908	0			
DWR ID DWR_MA0013_01_s _ 2016_4								
	Comment Code							

Inspector Comment

2011 - Small erosion pocket likely caused by irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CHK_11-7_R]

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	11.60	Rating **	A/W	Issue No.		123	
LM End	11.60	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	DWR UCIP LMA Responsibility			89°	39.442639°	
пеш				-121.76007	'0	-121.760070 °	
DWR ID							

Inspector Comment

Comment Code

FS_ID:52233 DS_ID:16333 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 11.78)] FS Date: 6/19/2017 1:20:52 PM

LM Start	11.60	Rating **	A/W	Issue No.	123 (cont)
LM End	11.60	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52233_66934.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_SP_2018_52233_66932.jpg



WS slide gate with owner information.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	11.60	Rating **	A/W	Issue No.		123 (cont)	
LM End	11.60	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.44263	9°	39.442639	0
пеш				-121.76007	° o	-121.760070	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52233 DS_ID:16333 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 11.78)] FS Date: 6/19/2017 1:20:52 PM

Photo 3 of 3: UCIP_SP_2018_52233_66930.jpg



Trash rack on WS headwall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		124	
LM End	12.19	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.43510	69°	39.435169°	
пеш				-121.76529	90°	-121.765290 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52234 DS_ID:16334 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM

LM Start	12.19	Rating **	М	Issue No.	124 (cont)
LM End	12.19	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52234_66940.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP SP 2018 52234 66936.jpg



View of Ws slope and channel.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		124 (cont)
LM End	12.19	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.43516	9°	39.435169°
пеш				-121.76529	o°	-121.765290 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52234 DS_ID:16334 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM

Photo 3 of 3 : UCIP_SP_2018_52234_66939.jpg

Slide gate located on WS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	12.74	Rating **	М	Issue No.		125	
LM End	12.74	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.42807	'0 °	39.428070 °	
пеш				-121.77008	° 08	-121.770080 °	
DWR ID							

Inspector Comment

Comment Code

FS_ID:52236 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 6/19/2017 1:28:43 PM

LM Start	12.74	Rating **	М	Issue No.	125 (cont)
LM End	12.74	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52236_66952.jpg



Overview picture looking south on right bank of Cherokee Canal.

Photo 2 of 3: UCIP_SP_2018_52236_66959.jpg



View of WS slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	12.74	Rating **	М	Issue No.		125 (cont)
LM End	12.74	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.42807	o°	39.428070°
пеш				-121.77008	o°	-121.770080 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52236 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 6/19/2017 1:28:43 PM

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)]

Photo 3 of 3: UCIP_SP_2018_52236_66951.jpg



Slide gate located on WS slope. Owner information marked on gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.29	Rating **	М	Issue No.		126
LM End	13.29	Issue Type +	En	Location *		
Category	ental	GPS La	titud	le/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.4210	88°	39.421088 °
пеш				-121.7751	04°	-121.775104°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52237 DS_ID:16461 EP_NO: 17030

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/15/2017 No markers present near this levee unit. (DWR Sutter Yard- AFreitag)11/17/2016 Markers missing near the levee. Oly marker present is located on the East side of the Unit2 levee. (DWR Sutter Yard- AFreitag)4/28/2016 Lines lines are suspected to be located on the upstream side of the roadway bridge and not the downstream side like the coordinates in this report show. Will need to take new coordinate readings. Markers are missing near levees.7/13/2015 Unable to locate.5/21/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate any markers.4/18/2012 Attempt to locate this crossing during next inspection when tall grass is cleared from slopes-look for utility markers.

FIELD_STRUCT_DESC: 8-inch high density polyethylene (HDPE) communication conduit, contains three 2-inch and three 1.5-inch fiber optic cables, backfilled with bentonite on the ends of the bore casing through the levee at an unknown depth below the crown. Conduit is bored across and under Cherokee Canal and its levees. Permit records indicates the conduit is at least 5 feet below the bottom of the low flow of the channel. Owner is listed in the permit as Pacific Fiber Link LLC but permit Inspection sheets list Worldwide Fiber. (Permit No. 17030, 2000 - Worldwide Fiber)

FS Date: 6/19/2017 1:30:37 PM

LM Start	13.29	Rating **	М	Issue No.	126 (cont)
LM End	13.29	Issue Type +	En	Location *	



Marker located along side of road about 200 yds east of levees



Crossing owner contact info

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.33	Rating **	A/W	Issue No.		127		
LM End	13.33	Issue Type +	Ma	Location *				
Category	Suppleme	ental		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	DWR UCIP LMA Responsibility			39.4206	67°	39.420667	0	
пеш				-121.7757	00°	-121.775700	0	
DWR ID								
	Comment Code							

Inspector Comment

FS ID:52238 DS_ID:16337 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe

through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM

LM Start	13.33	Rating **	A/W	Issue No.	127 (cont)
LM End	13.33	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52238_66966.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_SP_2018_52238_66963.jpg



View of WS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.33	Rating **	A/W	Issue No.		127 (cont)		
LM End	13.33	Issue Type +	Ma	Location *				
Category				Supplemental		GPS Lat	itud	e/Longitude
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.42066	7°	39.420667°		
пеш				-121.77570	0 °	-121.775700 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:52238 DS_ID:16337 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

last inspection.7/15/2013 Same as last inspection.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM



View of WS slope and channel.

LM Start	13.76	Rating **	U	Issue No.		61			
LM End	13.76	Issue Type +	Ma	Location *	LS				
Category Earthen Levee				GPS Latitude/Longitude					
Category				Start		End			
Item	Trim / Thin Trees			39.416854°		39.416854°			
item			-121.781855 °		-121.781855 °				
DWR ID	DWR ID DWR_MA0013_01_f _ 2016_61								
Comment Code									
T1 : Trim trees to at least five feet above ground level.									

Inspector Comment



View of the overgrown trees and vegetation along the landside slope and toe.

nce Deficiency System Obsolescence

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenar
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & :
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforceme

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.76	Rating **	U	Issue No.		128
LM End	13.76	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.41683	3°	39.416833°
пеш				-121.78193	80°	-121.781930 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52239 DS_ID:16338 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 6/19/2017 1:43:53 PM



WS headwall and flap gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.76	Rating **	U	Issue No.		128 (cont)
LM End	13.76	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.41683	3°	39.416833
пеш				-121.781930	°	-121.781930
DWR ID						

Inspector Comment

Comment Code

FS_ID:52239 DS_ID:16338 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 6/19/2017 1:43:53 PM



View of channel at crossing.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.76	Rating **	U	Issue No.		128 (cont)	
LM End	13.76	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.41683	3°	39.416833	0
пеш				-121.78193	0°	-121.781930	0
DWR ID							

Comment Code

Inspector Comment

FS ID:52239 DS_ID:16338 EP NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 6/19/2017 1:43:53 PM

Photo 3 of 3: UCIP_SP_2018_52239_66969.jpg



Tree fallen at LS headwall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.77	Rating **	М	Issue No.		129
LM End	13.77	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude
Calegory				Start		End
Itom	DWR UC	IP LMA Respo	onsibility	39.41675	6°	39.416756°
пеш	Item			-121.78206	0 °	-121.782060 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52240 DS_ID:16339 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Abandoned- still only the structure on the WS shoulder found. (DWR Sutter Yard- AFreitag)11/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)5/03/2016 ABANDONED CROSSING7/13/2015 Abandoned crossing. Slide gate is buried on the WS.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Nonfunctional crossing-buried slide gate on WS. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS LS slopes or toe.This crossing is listed in the USACE periodic inspection report as Corp's Inspection ID# USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS

slope.
FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.97)]

FS Date: 6/19/2017 1:53:35 PM

LM Start	13.77	Rating **	М	Issue No.	129 (cont)
LM End	13.77	Issue Type +	Ma	Location *	



Buried slide gate on the WS slope.

Photo 2 of 2: UCIP_SP_2018_52240_66973.jpg



View of LS slope and toe. Unable to find welded plate on LS.

Location Rating Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

	44.00	Poting **	N 4	Issue No.		50		
LM Start	14.22	Rating **	М	issue ivo.		59		
LM End	14.22	Issue Type +	En	Location *		LS		
Category Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End		
Item	Encroachments				'26	39.412726°		
item				-121.7886	-121.788658 °			
DWR ID DWR_MA0013_01_f _ 2016_59								
	Comment Code							
DE : Debri	s							
		Inspecto	or Comm	nent				
Remove th	ne debris fi	om the landsi	de slope).				
·								

Photo 1 of 1 : SP_2018_MA0013_300_59_20180425_00143.jpg



View of the debris along the landside slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		130			
LM End	14.58	Issue Type +	Ма	Location *					
Category	Supplemental					GPS Latitude/Longitude			
Calegory	Calegory			Start		End			
Item	DWR UCIP LMA Responsibility			39.40948	°	39.409481 °			
Item	item			-121.794010 °		-121.794010 °			
DWR ID									

Comment Code

Inspector Comment

FS_ID:52241 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 6/19/2017 1:55:54 PM



Headwall and flapgate located on water side of levee

CR: Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		130 (cont)
LM End	14.58	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory	Calegory			Start		End
Item	DWR UC	DWR UCIP LMA Responsibility			1°	39.409481 °
пеш				-121.79401	°	-121.794010 °
DWR ID						

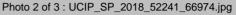
Comment Code Inspector Comment

FS ID:52241 DS_ID:16368 EP NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]

FS Date: 6/19/2017 1:55:54 PM





Headwall and flapgate located on water side of levee

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		130 (cont)	
LM End	14.58	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCIP LMA Responsibility			39.40948	1 °	39.409481	0
пеш				-121.79401	0 °	-121.794010	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52241 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 6/19/2017 1:55:54 PM

Photo 3 of 3 : UCIP_SP_2018_52241_66975.jpg



Head wall and screw gate located on land side of levee

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.		131
LM End	14.91	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Calegory					End
Item	DWR UCIP LMA Responsibility			39.40657	o°	39.406570 °
пеш				-121.79877	o°	-121.798770 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52242 DS_ID:16367 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

FS Date: 6/19/2017 2:01:26 PM

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]

 LM Start
 14.91
 Rating **
 A/W
 Issue No.
 131 (cont)

 LM End
 14.91
 Issue Type +
 Ma
 Location *



WS headwall and flapgate

Photo 2 of 3: UCIP_SP_2018_52242_66980.jpg



Slide gate located on LS toe. Dense vegetation present on LS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.		131 (cont)
LM End	14.91	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Category				Start		End
Item	DWR UCIP LMA Responsibility			39.40657	70°	39.406570 °
пеш				-121.7987	70°	-121.798770 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52242 DS_ID:16367 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

FS Date: 6/19/2017 2:01:26 PM

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]





WS slope cleared of vegetation

LM Start	15.58	Rating **	М	Issue No.		57	
LIVI Start	13.30	rtating	IVI	10000 140.		J1	
LM End	15.58	Issue Type +	Ма	Location *		LS	
Category	evee	GPS La	atitud	le/Longitude			
Catogory	Category			Start		End	
Item	Slope Sta	39.400380°		39.400380 °			
Item	Item				32°	-121.808432 °	
DWR ID	DWR ID DWR_MA0013_01_f _ 2016_57						
	Comment Code						
S1 : Repai	S1 : Repair slope instability.						
Inspector Comment							

Photo 1 of 1 : SP_2018_MA0013	_300_57_20180305_00010.jpg



View of slope instability along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.72	Rating **	М	Issue No.		132
LM End	15.72	Issue Type +	Ma	Location *		
Category	Suppleme	GPS La	ituc	le/Longitude		
Calegory				Start		End
Item	DWR UCIP LMA Responsibility			39.39905	1°	39.399051°
item				-121.81055	0°	-121.810550 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52243 DS_ID:16364 EP_NO: 7521

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends completely submerged during site visit. Pipe has been selected to be internally cleaned and increased as part of the DMP project. (DMP Sytter Verd

inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.95)] FS Date: 6/19/2017 2:02:42 PM Photo 1 of 3: UCIP_SP_2018_52243_66989.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.72	Rating **	М	Issue No.		132 (cont)
LM End	15.72	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Lati	tuc	le/Longitude		
Calegory		Start		End		
Item	DWR UC	DWR UCIP LMA Responsibility			°	39.399051 °
пеш				-121.810550	°	-121.810550 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52243 DS_ID:16364 EP_NO: 7521

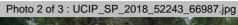
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends completely submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-

AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- AFreitag)5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.95)] FS Date: 6/19/2017 2:02:42 PM





View of WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.72	Rating **	М	Issue No.		132 (cont)
LM End	15.72	Issue Type +	Ма	Location *		
Category	Supplemental GPS Latitude/Long			le/Longitude		
Calegory	Category					End
Item	DWR UCIP LMA Responsibility			39.3990	51 °	39.399051 °
пеш				-121.8105	50°	-121.810550 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52243 DS_ID:16364 EP_NO: 7521

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends completely submerged during site visit. Pipe has been selected to be internally cleaned and increased as part of the DMP project (DMP Sytter York).

inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.95)] FS Date: 6/19/2017 2:02:42 PM

Photo 3 of 3: UCIP_SP_2018_52243_66986.jpg



View of headwall within channel.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

	45.75	Dating **	Λ.	Janua Na				
LM Start	15.75	Rating **	Α	Issue No.		20		
LM End	18.50	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio		39.3987	° 08	39.373430°			
пеш			-121.8109	32°	-121.850527 °			
DWR ID DWR_MA0013_01_s _ 2018_20								
		Comn	nent Cod	le				
V1 : Control annual grass and weeds on the levee slopes and easements.								
Inspector Comment								
The vegetation was removed from the landside slope.								

Photo 1 of 1 : SP_2018_MA0013_300_20_20180425_00147.jpg

View of no vegetation along the landside slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.77	Rating **	М	Issue No.		133	
LM End	15.77	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS La	atitud	e/Longitude		
Calegory		Start		End			
Item	DWR UC	DWR UCIP Field Study			15 °	39.398615	0
пеш				-121.8112	50°	-121.811250	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52244 DS_ID:16373 EP_NO: 11805B Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends submerged during site visit. LS ditch near pipe end is heavily vegetated and covering the pipe end. There is some erosion happening at the LS levee toe but this is more of a ditch problem and not a problem with the pipe. (DWR Sutter Yard- AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing was underwater on both sides of levee during this inspection. Looks as if the wodden walkway was the same and no repairs have been made.7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden wlalkway to the screwgate needs repairs.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 48-inch reinforced concrete irrigation pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on the waterside (WS) of levee. Revetment on the WS slope. Irrigation ditch on the landside (LS). (Permit No. 11805, 11805B, 1979 - Elna Schohr, Inc.) [Additional Reference(s): DWR Levee Log, FS Date: 6/19/2017 2:04:34 PM

LM Start	15.77	Rating **	М	Issue No.	133 (cont)
LM End	15.77	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_SP_2018_52244_66993.jpg



WS view of appurtances (catwalk, slide gate, and headwall)

Photo 2 of 3: UCIP_SP_2018_52244_66995.jpg



WS view of catwalk, slide/screw gate, and headwall

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.77	Rating **	М	Issue No.		133 (cont)
LM End	15.77	Issue Type +	En	Location *		
Category	Supplemental			GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		39.39861	5°	39.398615
Item				-121.811250	°	-121.811250
DWR ID						

Comment Code

Inspector Comment

FS_ID:52244 DS_ID:16373 EP_NO: 11805B Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends submerged during site visit. LS ditch near pipe end is heavily vegetated and covering the pipe end. There is some erosion happening at the LS levee toe but this is more of a ditch problem and not a problem with the pipe. (DWR Sutter Yard-AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing was underwater on both sides of levee during this inspection. Looks as if the wodden walkway was the same and no repairs have been made.7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden wlalkway to the screwgate needs repairs.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 48-inch reinforced concrete irrigation pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on the waterside (WS) of levee. Revetment on the WS slope. Irrigation ditch on the landside (LS). (Permit No. 11805, 11805B, 1979 - Elna Schohr, Inc.) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 6/19/2017 2:04:34 PM

Photo 3 of 3: UCIP_SP_2018_52244_66996.jpg



LS view of shoulder and slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	16.22	Rating **	М	Issue No.		7		
LM End	17.17	Issue Type +	En	Location *		LS		
Category	Earthen Levee			GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Encroach	ments		39.3945	23 °	39.385580°		
пеш			-121.8176	30°	-121.831282°			
DWR ID	DWR_MA0	013_01_s _ 201	2_7			·		
		Comn	nent Cod	le				
DT : Ditch								
	Inspector Comment							
1								

No Photos

LM Start	16.52	Rating **	М	Issue No.		56	
LM End	16.52	Issue Type +	Ma	Location *		LS	
Category	evee	GPS La	atitud	e/Longitude			
Calegory	Category					End	
Item	Trim / Thi	n Trees		39.3916	75°	39.391675 °	
item				-121.8219	32 °	-121.821932 °	
DWR ID DWR_MA0013_01_f _ 2016_56							
	Comment Code						
T4 T-1 (Title trans to at least five fact shows many disord						

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



View of dense trees along the landside toe.

LM Start	16.88	Rating **	М	Issue No.		55		
LM End	16.88	Issue Type +	Ma	Location *	LS			
Earthen Levee			GPS L	atitud	le/Longitude			
Category				Start		End		
Item	Slope Stability				26°	39.388326°		
пеш			-121.8271	37°	-121.827137 °			
DWR ID	DWR_MA0	013_01_f _ 201	6_55					
		Comn	nent Cod	le				
S1 : Repai	r slope ins	tability.						
	Inspector Comment							



View of slope instability issue along the landside slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	17.18	Rating **	М	Issue No.		134	
LM End	17.18	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.38554	40 °	39.385540	0
пеш				-121.83128	30 °	-121.831280	0
DWR ID							Ī

Comment Code

Inspector Comment

FS_ID:52246 DS_ID:16371 EP_NO: 3511

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/15/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/17/2016 Unable to locate. (DWR Sutter Yard-AFreitag)5/03/2016 Unable to locate.7/13/2015 Unable to locate.5/22/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate.4/18/2012 Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968 USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees.

FIELD_STRUCT_DESC: U.S. Army communication cable through the levee, 3 feet below the crown. (Permit No. 3511, 1961 - US Army Engineer District) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/19/2017 2:11:48 PM

No Photos

+ Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	17.23	Rating **	М	Issue No.		135
LM End	17.23	Issue Type +	Ма	Location *		
Category	Suppleme	oplemental GPS Latitude/Longitude				le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.3851	72 °	39.385172°
пеш				-121.8320	60°	-121.832060 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52249 DS_ID:16369 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]

FS Date: 6/19/2017 2:20:18 PM

LM Start	17.23	Rating **	М	Issue No.	135 (cont)
LM End	17.23	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52249_67017.jpg

View of WS slope and toe.

Photo 2 of 3: UCIP_SP_2018_52249_67019.jpg



View of WS headwall and flap gate.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

LM Start	17.23	Rating **	М	Issue No.		135 (cont)
LM End	17.23	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory						End
Item	DWR UC	IP LMA Respo	onsibility	39.38517	2°	39.385172°
пеш				-121.83206	o°	-121.832060 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52249 DS_ID:16369 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos

of cleared WS & LS slopes. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]

FS Date: 6/19/2017 2:20:18 PM



View of LS headwall.

LM Start	17.46	Rating **	М	Issue No.		9	
LM End	17.50	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Encroachments			39.382943 °		39.382635	
ilem			-121.835447 °		-121.836012	0	
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_9						
		Comn	nent Cod	le			
DT : Ditch							
Inspector Comment							

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

MA0013

Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	04/17/2018 04/17/2018	Bob Duffey

		D :: **					
LM Start	17.47	Rating **	М	Issue No.		15	
LM End	17.94	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	ments	39.3828	52°	39.378481 °			
item				-121.8356	54°	-121.842394 °	
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_15						
		Comn	nent Cod	le			
DT : Ditch							
		Inspecto	or Comm	nent			

No Photos

LM Start	18.58	Rating **	С	Issue No.		54	
LM End	18.58	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Animal Control			39.3727	93°	39.372793	0
пеш				-121.8516	77 °	-121.851677	0
DWR ID DWR_MA0013_01_f _ 2016_54							

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

The rodent holes was repaired along the landside slope.

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway		
Unit No. 02 Cherokee Canal	Left	22.84

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/17/2018 - 4/17/2018			
DWR Inspector	Bob Duffey			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		912
LM End	0.05	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude
Calegory						End
Item	DWR UC	P LMA Respo	onsibility	39.57381	6°	39.573816°
пеш				-121.70129	0 °	-121.701290°
DWR ID						·

Inspector Comment

Comment Code

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning

properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on

both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 6/7/2017 12:00:22 PM



Overview looking south on left levee

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		912 (cont)	
LM End	0.05	Issue Type +	Ма	Location *			
Category	Supplemental			GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.57381	16°	39.573816	0
пеш				-121.70129	90°	-121.701290	٥
DWR ID							

Comment Code

Inspector Comment

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP -

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 6/7/2017 12:00:22 PM



Headwall and flap gate on WS. Soil and pipes stockpiled next to headwall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		912 (cont)	
LM End	0.05	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.5738	16°	39.573816	0
пеш				-121.7012	90°	-121.701290	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP -

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 6/7/2017 12:00:22 PM



LS headwall blocked by overgrown branches.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.06	Rating **	М	Issue No.		50	
LM End	0.06	Issue Type +	Ma	Location *		WS	
Category	evee		GPS La	atitud	le/Longitude		
Calegory	Category					End	
Item	Trim / Thi	n Trees	39.5736	92°	39.573692 °		
Item		-121.701286°					
DWR ID	DWR_MA0	013_02_f _ 201	6_50				
		Comn	nent Cod	le			
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	l and	froom to	
		Inspecto	or Comm	nent			

No Photos

LM Start	0.07	Rating **	M	Issue No.		1		
LM End	0.17	Issue Type +	En	Location *		WS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory	Calegory					End		
Item	Encroach	Encroachments				39.572455 °		
пеш				-121.701387 °		-121.702370 °		
DWR ID	DWR_MA0	013_02_s _ 201	2_1					
		Comn	nent Coo	le				
EQ : Equip	ment							
	Inspector Comment							

No Photos

		D // ++	_				_
LM Start	0.21	Rating **	С	Issue No.		53	
LM End	0.56	Issue Type +	En	Location *		LS	
Category	GPS La	atituc	de/Longitude				
Category	Category					End	
Item	Encroach	ments		39.5718	21 °	39.566737	0
пеш				-121.702372 °		-121.702316	0
DWR ID	DWR_MA0	013_02_f _ 201	6_53				
		Comn	nent Coo	le			
AT : Agricu	ıltural tillin	g					
Inspector Comment							
Monitor the tilling to make sure farmer is not encroaching into the levee.							

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		913	
LM End	0.58	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	P LMA Respo	onsibility	39.5664	79°	39.566479	0
пеш				-121.7024	30°	-121.702430	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM



Overview looking south

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		913 (cont)	
LM End	0.58	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lati	tud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.56647	°	39.566479	٥
пеш				-121.702430	°	-121.702430	٥
DWR ID							

Inspector Comment

Comment Code

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM

Photo 2 of 3: UCIP_SP_2018_52112_67048.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		913 (cont)	
LM End	0.58	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.56647	9°	39.566479	0
пеш				-121.70243	o°	-121.702430	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM

Photo 3 of 3: UCIP_SP_2018_52112_67045.jpg



Screw gate located on WS of levee. Screw gate covers needs to be repaired.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	0.59	Rating **	М	Issue No.		77	
LM End	22.34	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		39.5662	87°	39.358318 °	
пеш				-121.7024	35 °	-121.875355 °	
DWR ID	DWR_MA0	013_02_s _ 201	8_77				
		Comn	nent Cod	le			
V1 : Contro easements	•	grass and wee	ds on th	e levee slop	oes a	and	
		Inspecto	or Comm	nent			
Trim the native vegetation on the waterside slope.							



View of the native vegetation along the waterside slope.

LM Start	1.60	Rating **	U	Issue No.		56	
LM End	1.63	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroachments				95°	39.551731 °	
пеш				-121.704786 ° -121.704			
DWR ID	DWR_MA0	013_02_s _ 201	6_56				
		Comn	nent Cod	le			
DT : Ditch							
Inspector Comment							
						-	



View of the agricultural ditch along the landside toe.

LM Start	1.63	Rating **	М	Issue No.		76
LM End	17.21	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		39.5517	75 °	39.403280 °
item				-121.7047	25 °	-121.799552 °
DWR ID	DWR_MA0	013_02_s _ 201	8_76			
		Comn	nent Cod	le		
V1 : Contro easements		rass and wee	ds on th	e levee slo _l	oes a	and
Inspector Comment						
Trim the native vegetation on the landside slope.						



View of the native vegetation along the landside slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.		914				
LM End	1.70 Issue Type + Ma Location *		Issue Type + Ma Location *		1.70 Issue Type + Ma Location *					
Category	Suppleme	ental		GPS Lat	tud	e/Longitude				
Calegory				Start		End				
Item	DWR UC	IP LMA Respo	onsibility	39.55117	3°	39.551178°				
пеш				-121.70566	°	-121.705660 °				
DWR ID										

Comment Code

Inspector Comment

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleated of vegetation and is in good condition. LS screw gate frame

is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil

USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM Photo 1 of 3: UCIP_SP_2018_52114_67059.jpg



Overview of crossing

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.		914 (cont)		
LM End	1.70	Issue Type +	Ма	Location *				
Category				Supplemental GPS Latitud				le/Longitude
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.55117	8 °	39.551178°		
пеш				-121.70566	0 °	-121.705660 °		
DWR ID						·		

Inspector Comment

Comment Code

FS_ID:52114 DS_ID:16399 EP_NO: N/A

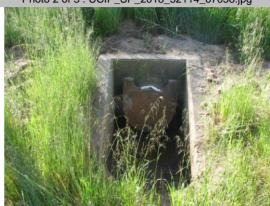
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil

and LS gate not functioning becasue of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM

Photo 2 of 3: UCIP_SP_2018_52114_67058.jpg



View of flap gate on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.		914 (cont)	
LM End	1.70	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.55117	3°	39.551178 °	
пеш				-121.70566	°	-121.705660 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil

and LS gate not functioning becasue of overgrown vegetation.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM

Photo 3 of 3: UCIP_SP_2018_52114_67057.jpg



View of WS toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		915		
LM End	2.53	Issue Type +	Ма	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.53919	5 °	39.539195°		
пеш				-121.70607	0 °	-121.706070 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:52115 DS_ID:16400 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-

AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.

FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

LM Start	2.53	Rating **	A/W	Issue No.	915 (cont)
I M End	2.53	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52115_67063.jpg



Overview of levee crown looking south

Photo 2 of 3: UCIP_SP_2018_52115_67068.jpg



View of WS slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

MA0013

Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		915 (cont)	
LM End	2.53	Issue Type +	Ma	Location *			
Category Supplemental				GPS Lat	ituc	le/Longitude	
Calegory				Start		End	
Item	DWR UC	DWR UCIP LMA Responsibility			5 °	39.539195	0
пеш				-121.70607	o°	-121.706070	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52115 DS_ID:16400 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-

AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.

FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

Photo 3 of 3: UCIP_SP_2018_52115_67064.jpg



Headwall and flap gates (2) located on WS

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		916					
LM End	2.53	Issue Type +	Ma	Location *							
Category				Supplemental				GPS La	titud	le/Longitude	
Calegory				Start		End					
Item	DWR UC	IP LMA Respo	onsibility	39.53917	'9	39.539179	0				
пеш				-121.70606	° 0	-121.706060	0				
DWR ID											

Comment Code

Inspector Comment

FS_ID:52116 DS_ID:17169 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last

inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]
FS Date: 6/7/2017 12:28:51 PM

LM Start	2.53	Rating **	A/W	Issue No.	916 (cont)
LM End	2.53	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52116_67075.jpg



Overview at levee crown looking south

Photo 2 of 3: UCIP_SP_2018_52116_67074.jpg



View of WS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		916 (cont)	
LM End	2.53	Issue Type +	Ма	Location *			
Category Supplemental				GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.53917	'9	39.539179	0
пеш				-121.70606	° 08	-121.706060	0
DWR ID							

Comment Code

Inspector Comment

FS ID:52116 DS_ID:17169 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last

inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection.

FIELD STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)] FS Date: 6/7/2017 12:28:51 PM

Photo 3 of 3: UCIP_SP_2018_52116_67071.jpg



Headwall and flap gates (2) located on the WS.

N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		917
LM End	2.62	Issue Type +	Ма	Location *		
Category	GPS Latitude/Longitude					
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.53786	4 °	39.537864°
пеш				-121.70619	0°	-121.706190°
DWR ID						·

Inspector Comment

Comment Code

FS_ID:52117 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM



Overview looking south from left levee

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		917 (cont)
LM End	2.62	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.53786	1°	39.537864°
пеш				-121.70619	°	-121.706190°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52117 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM

Photo 2 of 3: UCIP_SP_2018_52117_67076.jpg

Headwall and flap gate located on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		917 (cont)
LM End	2.62	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.53786	4 °	39.537864°
пеш				-121.70619	0°	-121.706190 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52117 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM



Headwall and screw gate located on LS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		918
LM End	2.63	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.5376	71 °	39.537671 °
пеш				-121.7062	10°	-121.706210 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52119 DS_ID:16403 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.12/9/2013 Same as last inspection and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

LM Start	2.63	Rating **	M	Issue No.	918 (cont)
LM End	2 63	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52119_67087.jpg



Overview at levee crown looking south

Photo 2 of 3: UCIP_SP_2018_52119_67084.jpg



Headwall and flap gate located on WS

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		918 (cont)
LM End	2.63	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory	Calegory			Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.53767	1°	39.537671 °
пеш				-121.70621	0°	-121.706210 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52119 DS_ID:16403 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.12/9/2013 Same as last inspection and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

Photo 3 of 3: UCIP_SP_2018_52119_67086.jpg



Headwall and screw gate located on the LS

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.		Issue No.		919	
LM End	2.65	Issue Type +	Ма	Location *					
Supplemental				GPS Latitude/Longitude					
Calegory			Start		End				
Item	DWR UC	IP LMA Respo	nsibility	39.5374	66°	39.537466	0		
пеш		-121.706240 °		-121.706240					
DWR ID									
Comment Code									

Inspector Comment

FS_ID:52120 DS_ID:16415 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM

LM Start	2.65	Rating **	М	Issue No.	919 (cont)
LM End	2.65	Issue Type +	Ma	Location *	



Overview looking south from left levee

Photo 2 of 3: UCIP_SP_2018_52120_67091.jpg



Headwall and flap gate located on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.	919 (cont)		
LM End	2.65	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	tud	le/Longitude	
Calegory	Category					End	
Item	DWR UC	IP LMA Respo	onsibility	39.53746	o°	39.537466	
Item				-121.70624	°	-121.706240	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52120 DS_ID:16415 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM

Photo 3 of 3: UCIP_SP_2018_52120_67092.jpg



WS headwall and flap gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920	
LM End	3.59	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory	Calegory				Start		
Item	DWR UC	IP LMA Respo	nsibility	39.52382	9°	39.523829	0
пеш				-121.70629	o°	-121.706290	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52121 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 6/7/2017 12:58:12 PM

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]

Photo 1 of 3: UCIP_SP_2018_52121_67094.jpg



Overview looking south from left levee

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920 (cont)	
LM End	3.59	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.52382	9°	39.523829	0
пеш				-121.70629	°	-121.706290	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:52121 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]
FS Date: 6/7/2017 12:58:12 PM

Photo 2 of 3: UCIP_SP_2018_52121_67095.jpg



Flap gate submerged in water on WS of levee

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920 (cont)
LM End	3.59	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory	ory			Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.52382	9°	39.523829 °
пеш				-121.70629	o°	-121.706290 °
DWR ID						

Comment Code

Inspector Comment

FS ID:52121 DS_ID:16405 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)] FS Date: 6/7/2017 12:58:12 PM



View of flap gate submerged on WS toe.

Rating

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.65	Rating **	A/W	Issue No.	921		
LM End	3.65	Issue Type +	Ма	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory		Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.5235	56°	39.523556°	
пеш				-121.7053	40 °	-121.705340 °	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:52122 DS_ID:16848 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

LM Start	3.65	Rating **	A/W	Issue No.	921 (cont)
LM End	3.65	Issue Type +	Ma	Location *	



Overview looking south on left levee

Photo 2 of 3: UCIP_SP_2018_52122_67103.jpg



Headwall and flap gate located on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

ı								_
	LM Start	3.65	Rating **	A/W	Issue No.		921 (cont)	
	LM End	3.65	Issue Type +	Ma	Location *			
	Category	Suppleme	ental		GPS La	titud	le/Longitude	
	Calegory				Start		End	
	Item	DWR UC	IP LMA Respo	onsibility	39.5235	56°	39.523556	0
	пеш				-121.7053	40 °	-121.705340	0
	DWR ID							

Comment Code

Inspector Comment

FS_ID:52122 DS_ID:16848 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

Photo 3 of 3: UCIP_SP_2018_52122_67101.jpg



Headwall and screw gate located on LS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.	922		
LM End	3.83	Issue Type +	Ма	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Category			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.5243	50°	39.524350°	
пеш				-121.7021	80°	-121.702180 °	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:52123 DS_ID:16847 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS

WS gate wedged open & missing LS slide gate.
FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for



Overview looking south on left levee

FS Date: 6/7/2017 1:24:40 PM

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.		922 (cont)	
LM End	3.83	Issue Type +	Ma	Location *			
Category	Suppleme	Supplemental				e/Longitude	
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.5243	50°	39.524350	0
пеш				-121.70218	80 °	-121.702180	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:52123 DS_ID:16847 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag) 11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag) 4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition. 7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain. 5/29/2014 Same as last inspection. 12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing. 7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks. 4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)] FS Date: 6/7/2017 1:24:40 PM



Headwall and flap gate located on WS toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.	922 (cont)		
LM End	3.83	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.52435	o°	39.524350	0
пеш				-121.70218	o°	-121.702180	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:52123 DS_ID:16847 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

FS Date: 6/7/2017 1:24:40 PM

Photo 3 of 3: UCIP_SP_2018_52123_67110.jpg



View of channel at crossing looking D/S.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	3.84	Rating **	М	Issue No.		66	
LM End	3.84	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				atituc	le/Longitude	
Calegory				Start		End	
Item	l	rface / Depres	ssions /	39.5244	67°	39.524467 °	
Item	Rutting -121.701878 ° -121.70187						
DWR ID DWR_MA0013_02_s _ 2018_66							
		Comn	nent Cod	le			
C1 : Add a above the			re-grade	the levee t	to br	ing the crown	
		Inspecto	or Comm	nent			
Repare the	e crown roa	adway.					



View of the erosion on the crown roadway caused by flood water over topping.

LM Start	4.04	Rating **	М	Issue No.		911	
LM End	4.78	Issue Type +	En	Location *		WS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	ments		39.5266	53°	39.534091 °	
item				-121.699675 °		5° -121.690404°	
DWR ID	DWR_MA0	013_02_s _ 201	2_911				
		Comn	nent Cod	le			
DT : Ditch							
		Inspecto	or Comm	nent			



View of agricultural ditch along the toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.17	Rating **	М	Issue No.		923
LM End	4.17	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory						End
Item	DWR UC	IP LMA Respo	onsibility	39.5282	10°	39.528210 °
пеш				-121.6984	10 °	-121.698410 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52124 DS_ID:16846 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)]

FS Date: 6/7/2017 1:27:00 PM

LM Start	4.17	Rating **	М	Issue No.	923 (cont)
LM End	4.17	Issue Type +	Ma	Location *	



Overview looking east on right bank of Cottonwood

Photo 2 of 3: UCIP SP 2018 52124 67116.jpg



Unable to determine condition of flap gate on WS due to high water.

Location Rating + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable WS: Water Side C: Corrected Ob: Design & System Obsolescence CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.17	Rating **	М	Issue No.	923 (cont)		
LM End	4.17	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.52821	0 °	39.528210	0
пеш				-121.69841	0 °	-121.698410	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52124 DS_ID:16846 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 4.20)] FS Date: 6/7/2017 1:27:00 PM

Photo 3 of 3: UCIP_SP_2018_52124_67113.jpg



Overview of LS screw gate and concrete sump structure.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.		924	
LM End	4.65	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
DWR UCIP LMA Responsibility				39.53251	10°	39.532510°	
пеш			-121.69134	10°	-121.691340 °		
DWR ID							

Inspector Comment

Comment Code

FS_ID:52125 DS_ID:16845 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope has been cleared of vegetation and is in good condition.4/19/2012 Limited inspection due to dense vegetation on WS slope. Need photos of clear WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)]

FS Date: 6/7/2017 1:41:34 PM

LM Start	4.65	Rating **	A/W	Issue No.	924 (cont)
LM End	4.65	Issue Type +	Ma	Location *	



Overview looking east on right levee of Gold Run Creek (referred to Unit 2 of Cherokee Canal).

Photo 2 of 3: UCIP SP 2018 52125 67122.jpg



Headwall and flap gate located on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.		924 (cont)		
LM End	4.65	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory		Start		End				
Item	DWR UC	IP LMA Respo	onsibility	39.5325	10°	39.532510	0	
пеш		-121.6913	40 °	-121.691340	0			
DWR ID								

Comment Code

Inspector Comment

FS_ID:52125 DS_ID:16845 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope has been cleared of vegetation and is in good condition.4/19/2012 Limited inspection due to dense vegetation on WS slope. Need photos of clear WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)]

FS Date: 6/7/2017 1:41:34 PM

Photo 3 of 3: UCIP_SP_2018_52125_67123.jpg



View of channel at crossing.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.01	Rating **	A/W	Issue No.		925	
LM End	5.01	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
DWR UCIP LMA Responsibility				39.52629	98°	39.526298°	
пеш				-121.688320 °		-121.688320 °	
DWR ID							

Inspector Comment

Comment Code

FS_ID:52126 DS_ID:16395 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing

appears to be in good condition.(DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.06)]

FS Date: 6/7/2017 1:54:08 PM

 LM Start
 5.01
 Rating **
 A/W
 Issue No.
 925 (cont)

 LM End
 5.01
 Issue Type +
 Ma
 Location *



Overview looking west on the left levee of Cottonwood

Photo 2 of 3: UCIP_SP_2018_52126_67129.jpg



Headwall and flap gate located on WS.

Location Rating Issue Type LS : Land Side Ma: Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.01	Rating **	A/W	Issue No.		925 (cont)	
LM End	5.01	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.52629	98°	39.526298	0
пеш				-121.68832	° 02	-121.688320	0
DWR ID							

Comment Code

Inspector Comment

FS ID:52126 DS_ID:16395 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.06)] FS Date: 6/7/2017 1:54:08 PM

Photo 3 of 3: UCIP_SP_2018_52126_67126.jpg



View of channel at crossing.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.09	Rating **	A/W	Issue No.		926	
LM End	5.09	Issue Type +	Ма	Location *			
Category	Supplemental				atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.5269	17°	39.526917	0
пеш				-121.6893	40°	-121.689340	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52129 DS_ID:16408 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as

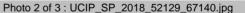
gate on LS.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken

LM Start	5.09	Rating **	A/W	Issue No.	926 (cont)
LM End	5.09	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking west.





Headwall and flap gate located on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.09	Rating **	A/W	Issue No.		926 (cont)	
LM End	5.09	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.5269	17°	39.526917 °	
пеш				-121.6893	40 °	-121.689340 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52129 DS_ID:16408 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken

gate on LS.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

Photo 3 of 3: UCIP_SP_2018_52129_67141.jpg



Overview of LS floor is higher in elevation than pipe invert causing build up sediment.

LM Start	5.16	Rating **	С	Issue No.	48		
LM End	5.16	Issue Type +	En	Location *		WS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		39.5269	32 °	39.526932	0
пеш				-121.6906	85 °	-121.690685	0
DWR ID	DWR_MAG	013_02_s _ 201	7_48				
		Comn	nent Cod	le			

PR : Prunings

Inspector Comment

The prunings was removed from the landside slope.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		927				
LM End	5.29	Issue Type +	Ma	Location *						
Category	Supplemental				Supplemental				tud	le/Longitude
Calegory				Start		End				
Item	DWR UC	P LMA Respo	onsibility	39.52595	3°	39.525958 °				
пеш				-121.692730	°	-121.692730 °				
DWR ID										

Comment Code

Inspector Comment

FS_ID:52130 DS_ID:16409 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)] FS Date: 6/7/2017 2:02:27 PM

LM Start	5.29	Rating **	М	Issue No.	927 (cont)
LM End	5.29	Issue Type +	Ма	Location *	

Photo 1 of 3: UCIP_SP_2018_52130_67146.jpg



Overview of crossing looking downstream.

Photo 2 of 3: UCIP_SP_2018_52130_67149.jpg



View of WS headwall with dense vegetation in channel.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		927 (cont)
LM End	5.29	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Lati	le/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.52595	3°	39.525958°
пеш				-121.692730	°	-121.692730 °
DWR ID						

Comment Code

Inspector Comment

FS ID:52130 DS_ID:16409 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]

FS Date: 6/7/2017 2:02:27 PM



Headwall and flap gate located on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.36	Rating **	М	Issue No.		928		
LM End	5.36	Issue Type +	En	Location *				
Catagory	Supplemental Supplemental			GPS Latitude/Longitude				
Calegory	Category		Start		End			
Item	DWR UC	IP Field Study		39.5253	61 °	39.525361	0	
пеш				-121.6936	30°	-121.693630	0	
DWR ID								

Comment Code

Inspector Comment

FS_ID:52131 DS_ID:16410 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/18/2016 Abandoned pipe. It is still present on both sides of the levee and capped on the WS. (DWR Sutter Yard- AFreitag)4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.

FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.41)]

FS Date: 6/7/2017 2:04:03 PM

LM Start	5.36	Rating **	М	Issue No.	928 (cont)
LM End	5.36	Issue Type +	En	Location *	



Overview of site



Capped irrigation pipe located on water side of levee

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.36	Rating **	М	Issue No.		928 (cont)	
LM End	5.36	Issue Type +	En	Location *			
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.5253	61 °	39.525361	0
пеш				-121.6936	30°	-121.693630	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52131 DS_ID:16410 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/18/2016 Abandoned pipe. It is still present on both sides of the levee and capped on the WS. (DWR Sutter Yard- AFreitag)4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.

FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.41)]

FS Date: 6/7/2017 2:04:03 PM



View of LS toe.

LM Start	5.50	Rating **	С	Issue No.		80	
LM End		Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		39.5243	73°		0
пеш				-121.6960	13 °		0
DWR ID	DWR_MA0	013_02_f _ 201	7_80				
		Comn	nent Cod	le			

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:244

Site Designation:LMA-47 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: LMA has already repaired this site.

No Photos

* Location	** Rating +		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.60	Rating **	С	Issue No.		81	
LM End		Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	e/Longitude		
Calegory	Calegory		Start		End		
Item	2017 Storm Damage			39.52434	0 °		0
item				-121.69788	3°		0
DWR ID	DWR_MA0	013_02_f _ 201	7_81				
		Comn	nent Cod	le			

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:245

Site Designation:LMA-48 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: LMA has already repaired this site.

LM Start	5.70	Rating **	С	Issue No.		82	
LM End		Issue Type +	Ma	Location *			
Category	Suppleme	ıpplemental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		39.5239	10°		0
пеш				-121.6996	16°		0

DWR ID DWR_MA0013_02_f _ 2017_82

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:246

Site Designation:LMA-49 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: LMA has already repaired this site.

No Photos

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.71	Rating **	М	Issue No.	49		
LM End	5.71	Issue Type +	Ма	Location *	WS		
Catagony	Category Earthen Levee			GPS La	le/Longitude		
Category			Start		End		
Item	Erosion /	Erosion / Bank Caving)3 °	39.523803 °	
пеш				-121.69980)4 °	-121.699804 °	
DWR ID DWR_MA0013_02_f _ 2016_49							
Comment Code							
E0 0-1	to the managed at	- (1 1)		Oran and the		- C	

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

1' by 2' by 4' hole in the levee toe that appears to be a temporary pump intake.

Photo 1 of 1 : SP_2018_MA0013_301_49_20180305_00011.jpg



View of the man made hole at the waterside levee toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.80	Rating **	М	Issue No.		929	
LM End	5.80	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory	ory		Start		End		
Item	DWR UC	IP Field Study		39.5233	81 °	39.523381	0
пеш				-121.7012	70°	-121.701270	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52132 DS_ID:16411 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends were underwater but it appears

that the LS slide gate is still missing. (DWR Sutter Yard-

AFreitag)11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP -

omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition.

(DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection.

(DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the

USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM

5.85)] FS Date: 6/7/2017 2:06:17 PM



Overview looking south

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.80	Rating **	М	Issue No.		929 (cont)	
LM End	5.80	Issue Type +	En	Location *			
Catagony	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory	Category		Start		End		
Item	DWR UC	IP Field Study		39.52338	1°	39.523381	0
пеш				-121.70127	0°	-121.701270	0
DWR ID							

Comment Code

Inspector Comment

FS ID:52132 DS_ID:16411 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends were underwater but it appears

that the LS slide gate is still missing. (DWR Sutter Yard-

AFreitag)11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP -

omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition.

(DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection.

(DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the

USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM

5.85)] FS Date: 6/7/2017 2:06:17 PM

Photo 2 of 3: UCIP_SP_2018_52132_67157.jpg



Headwall and flap gate on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	5.80	Rating **	М	Issue No.		929 (cont)	
LM End	5.80	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.52338	1°	39.523381	0
пеш				-121.70127	o°	-121.701270	0
DWR ID							

Comment Code

Inspector Comment

FS ID:52132 DS_ID:16411 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends were underwater but it appears

that the LS slide gate is still missing. (DWR Sutter Yard-

AFreitag)11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP -

omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition.

(DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection.

(DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the

USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM

5.85)] FS Date: 6/7/2017 2:06:17 PM

Photo 3 of 3: UCIP_SP_2018_52132_67156.jpg



Headwall and damaged/missing screw gate on LS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	6.00	Rating **	С	Issue No.	91		
LM End		Issue Type +	Ма	Location *			
Category	Supplemental			GPS La	atitude/Longitude		
Calegory	ategory					End	
Item	2017 Stor	2017 Storm Damage		39.52289	93 °		0
пеш				-121.70500)5 °		0
DWR ID	DWR_MA0	7_91					
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:247

Site Designation:LMA-50 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: LMA has already repaired this site.

Photo 1 of 1: SP 2018	ΜΔ0013	301 12	20180305	00004 ina
FIIULU I UI I . OF ZUIO	MADDIS	301 12	20100303	0000 4 .jpq

No Photos



View of the agricultural ditch along the toe.

2						
3						
itude						
End						
.502958	58	58				
.716953	53	53 '				
DWR ID DWR_MA0013_02_s _ 2012_12						
Comment Code						
Inspector Comment						
-						

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	7.18	Rating **	М	Issue No.		930
LM End	7.18	Issue Type +	En	Location *		
Catagony	Category Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	DWR UCIP Field Study			70°	39.507570°
пеш				-121.7138	70 °	-121.713870°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52139 DS_ID:17518 EP_NO: 5200B

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/5/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/18/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/29/2014 Same as last inspection.12/9/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate.4/24/2012 Not found - Need to verify if there are any signs of the structure during next inspection when slopes are cleared. If not will need to coordinate with applicant regarding the fate of this structure. FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee embankment, unknown depth below the crown. (Permit No. 5200B, 1967 - Richvale Irrigation District) Additional permits related to this structure include Permit No. 5200 and 5200A. FS Date: 6/7/2017 2:31:24 PM

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR: Crown

* Rating

A: Acceptable

M: Minimally Acceptable

U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.		931	
LM End	8.30	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Category			Start		End		
Item	DWR UCIP Field Study			39.4938	50°	39.493850°	
item				-121.724780 °		-121.724780 °	
DWR ID							
Comment Code							

Inspector Comment

FS_ID:52140 DS_ID:16413 EP_NO: 14704

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition. Unusre on the permit issues below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).

FIELD_STRUCT_DESC: Steel fiber optic cable through the levee, approximately 3.5 feet below the crown. The cable section across the channel is attached to the Cherokee Canal Dridge. (Permit No. 14704, 1987 - Sprint) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 6/7/2017 2:34:57 PM

LM Start	8.30	Rating **	М	Issue No.	931 (cont)
LM End	8.30	Issue Type +	En	Location *	



Buried cable box located on the LS edge.



WS view cable line attached to highway bridge.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.		932	
LM End	8.30	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	DWR UCIP Field Study			80°	39.493780°	
nem			-121.7248	40 °	-121.724840 °		
DWR ID							

Comment Code

Inspector Comment

FS_ID:52141 DS_ID:16404 EP_NO: 10589A Repair Type: Non-Urgent

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears in good condition. Unsure on the permit issues listed below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).

FIELD_STRUCT_DESC: 4-inch steel communication pipe, contains three telephone cables, through the levee, approximately 4 feet below the crown. The cable through the channel is buried approximately 5 feet deep. (Permit No. 10589, 1987 - Pacific Telephone and Telegraph Company [PT&T]) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 6/7/2017 2:37:34 PM

LM Start	8.30 Rating **		М	Issue No.	932 (cont)
LM End	8.30	Issue Type +	En	Location *	



Buried cable box located on the landside edge.



Waterside view of utility line alignment through levee then attached to bridge.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.56	Rating **	A/W	Issue No.		Issue No.		Issue No. 93		933	
LM End	9.56	Issue Type +	Ma	Location *							
Category	Supplemental Supplemental			GPS Latitude/Longitude							
Calegory			Start		End						
Item	DWR UCIP LMA Responsibility			39.4774	38°	39.477438	0				
item			-121.7352	° 00	-121.735200	0					
DWR ID											

Comment Code

Inspector Comment

FS_ID:52145 DS_ID:16838 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crossing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM

LM Start	9.56	Rating **	A/W	Issue No.	933 (cont)
LM End	9.56	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.



View of crossing looking from channel towards WS levee.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.56	Rating **	A/W	Issue No.		933 (cont)		
LM End	9.56	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.47743	38°	39.477438°		
Item				-121.73520	00°	-121.735200 °		
DWR ID								
Comment Code								

Inspector Comment

FS_ID:52145 DS_ID:16838 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM



WS view-access well located 60 feet from WS toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.		934	
LM End	9.57	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UC	IP LMA Respo	nsibility	39.47733	5°	39.477335°	
пеш				-121.73534	°	-121.735340°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52146 DS_ID:16839 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)] FS Date: 6/8/2017 8:20:37 AM

LM Start	9.57	Rating **	A/W	Issue No.	934 (cont)
LM End	9.57	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52146_67289.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 1 of 2)

Photo 2 of 3: UCIP SP 2018 52146 67287.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 2 of 2)

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.		934 (cont)	
LM End	9.57	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	egory			Start		End	
Itom	DWR UC	IP LMA Respo	nsibility	39.47733	85 °	39.477335	0
пеш	Item		-121.73534	° Ol	-121.735340	0	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52146 DS_ID:16839 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspeciton with clearned slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519. June 1962 (HLM 9.68)]

FS Date: 6/8/2017 8:20:37 AM

Photo 3 of 3: UCIP_SP_2018_52146_67286.jpg



View of crossing from LS. Dense vegetation along LS slope limited visual inspection. (LS Photo 1 of 2)

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.66	Rating **	М	Issue No.		Issue No. 935		935
LM End	9.66	Issue Type +	En	Location *				
Supplemental			GPS Latitude/Longitude					
Category		Start		End				
Item	DWR UC	IP Field Study		39.4762	60°	39.476260 °		
item		-121.736230 °		-121.736230 °				
DWR ID								

Inspector Comment

Comment Code

FS_ID:52148 DS_ID:18912 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. Another marker was found/photographed near the LS toe. Crossing also appears to cross through the Unit1 levee around CLM8.860. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.

FIELD_STRUCT_DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012. FS Date: 6/8/2017 8:23:22 AM

LM Start	9.66	Rating **	М	Issue No.	935 (cont)
LM End	9.66	Issue Type +	En	Location *	



Overview of levee crown at crossing.



Marker for buried fiber optic cable on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.66	Rating **	М	Issue No.		935 (cont)	
LM End	9.66	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		39.47626	o°	39.476260	٥
Item				-121.73623	°	-121.736230	٥
DWR ID							

Comment Code

Inspector Comment

FS ID:52148 DS_ID:18912 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. Another marker was found/photographed near the LS toe. Crossing also appears to cross through the Unit1 levee around CLM8.860. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.

FIELD_STRUCT_DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012. FS Date: 6/8/2017 8:23:22 AM



Marker for buried fiber optic cable on LS with contact information.

CR: Crown

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency

Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.67	Rating **	М	Issue No.		Issue No. 93		936
LM End	9.67	Issue Type +	En	Location *				
Supplemental			GPS Latitude/Longitude					
Category		Start		End				
Item	DWR UC	DWR UCIP Field Study			40°	39.476140 °		
пеш	item		-121.736390 °		-121.736390°			
DWR ID								

Comment Code

Inspector Comment

FS_ID:52149 DS_ID:18913 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection.4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspeciton submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates. FIELD_STRUCT_DESC: 8-inch high pressure line bored through the levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email yeok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing. No permit has been identified since crossing was field discovered in 2012. FS Date: 6/8/2017 8:34:40 AM

LM Start	9.67	Rating **	М	Issue No.	936 (cont)
LM End	9.67	Issue Type +	En	Location *	



Overview of levee crown at crossing

Photo 2 of 3: UCIP_SP_2018_52149_67294.jpg



WS marker with utility contact information.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.67	Rating **	М	Issue No.		936 (cont)	
LM End	9.67	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory	ategory			Start		End	
Itom	DWR UC	IP Field Study		39.4761	40°	39.476140 °	
пеш	Item		-121.7363	90°	-121.736390 °		
DWR ID							

Comment Code

Inspector Comment

FS_ID:52149 DS_ID:18913 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection.4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspeciton submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates. FIELD_STRUCT_DESC: 8-inch high pressure line bored through the levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email yeok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing. No permit has been identified since crossing was field discovered in 2012. FS Date: 6/8/2017 8:34:40 AM



View of LS slope and marker.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.69	Rating **	М	Issue No.		Issue No.		937
LM End	9.69	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory						End		
Item	DWR UC	IP Field Study		39.4759	60°	39.475960°		
пеш				-121.7365	40°	-121.736540 °		
DWR ID						·		

Comment Code

Inspector Comment

FS_ID:52150 DS_ID:18914 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013

Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if

permit exist for this crossing.

FIELD_STRUCT_DESC: Underground communication cable through the levee, depth unknown below the crown. Owner of encroachment is Pacific Telephone. No permit has been identified since crossing was field discovered in 2012.

FS Date: 6/8/2017 8:42:12 AM

LM Start	9.69	Rating **	М	Issue No.	937 (cont)
LM End	9.69	Issue Type +	En	Location *	



Overview of levee crown at crossing.



Marker located on LS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.69	Rating **	М	Issue No.		937 (cont)	
LM End	9.69	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.47596	0°	39.475960	0
пеш				-121.73654	0°	-121.736540	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52150 DS_ID:18914 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last

inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if

permit exist for this crossing.

FIELD_STRUCT_DESC: Underground communication cable through the levee, depth unknown below the crown. Owner of encroachment is Pacific Telephone. No permit has been identified since crossing was field discovered in 2012.

FS Date: 6/8/2017 8:42:12 AM

Photo 3 of 3: UCIP_SP_2018_52150_67298.jpg



Underground cable marker with contact information.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	9.88	Rating **	М	Issue No.		938	
LM End	9.88	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	itud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.47341	0°	39.473410	0
пеш				-121.73819	0°	-121.738190	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52151 DS_ID:17731 EP_NO: 16994

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/5/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/18/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate any signs of this crossing.4/24/2012 Unable to find any indicators for this crossing. It appears that this encroachment was not built. Check again during next inspection.

FIELD_STRUCT_DESC: 10-inch high-density polyethylene (HDPE) communication conduit through the levee, unknown depth below the crown. Conduit contains fiber-optic cables that goes across and under (bored) Cherokee Canal and its levees. Twelve inner ducts through casing with hand holes placed at each end for initial and future installation of fiber optic telecommunications cable. (Permit No. 16994, 2000 - Level 3 Comm)

FS Date: 6/8/2017 8:43:47 AM

LM Start	10.03	Rating **	М	Issue No.		13	
LM End	10.52	Issue Type +	En	Location *	LS		
Category	evee	GPS La	atitud	e/Longitude			
Calegory				Start		End	
Item	Encroach	ments		39.4715	17°	39.465113°	
пеш	-121.739433 ° -121.743592						
DWR ID	DWR ID DWR_MA0013_02_s _ 2012_13						
		Comn	nent Cod	le			
DT : Ditch							
		Inspecto	or Comm	ent			

No Photos

Photo 1 of 1: SP_2018_MA0013_301_13_20180305_00005.jpg



View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	10.56	Rating **	М	Issue No.		939	
LM End	10.56	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.46459	0°	39.464590	0
пеш				-121.74391	0 °	-121.743910	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52153 DS_ID:16472 EP NO: 10939

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Pole still present. (DWR Sutter Yard-AFreitag)11/17/2016 Pole still present within channel. (DWR Sutter Yard- AFreitag)4/26/2016 Pole within the channel not removed per permit description.6/30/2015 same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last

inspection.7/08/2013 Same as last inspection.4/24/2012 According to permit the existing pole and buried cable in the overflow area were to be removed. Pole is present in the channel.

FIELD_STRUCT_DESC: Reroute a buried wire across the left bank levee of Cherokee Canal at State Highway 162 Bridge abutment from that point to the downstream side of the bridge. From there the wire extends to the gaging station at the center of the bridge. The facility maintains service to the Department of Water Resources' Metering Station midspan of the bridge. (Permit No. 10939, 1976 - Pacific Telephone and Telegraph Company [PT&T])

FS Date: 6/8/2017 8:52:41 AM

Photo 1 of 1: UCIP_SP_2018_52153_67334.jpg



Pole within the channel was not removed.

LM Start	10.59	Rating **	М	Issue No.		18	
LM End	11.66	Issue Type +	En	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End		
Item	Encroach	ncroachments		39.46430)5°	39.450333 °	
item				-121.74417	72 °	-121.753157 °	
DWR ID	DWR_MAG	013_02_s _ 201	2_18				
Comment Code							

DT : Ditch

Inspector Comment

Photo 1 of 1: SP_2018_MA0013_301_18_20180305_00006.jpg



View of the agricultural ditch along the toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		940	
LM End	12.88	Issue Type +	Ма	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	P LMA Respo	onsibility	39.4347	79°	39.434779	٥
пеш				-121.7639	40°	-121.763940	٥
DWR ID							

Comment Code

Inspector Comment

FS_ID:52154 DS_ID:16385 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)]

FS Date: 6/8/2017 8:57:36 AM



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		940 (cont)	
LM End	12.88	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	itud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.43477	9°	39.434779	0
пеш				-121.76394	0°	-121.763940	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52154 DS_ID:16385 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)]

FS Date: 6/8/2017 8:57:36 AM

Photo 2 of 3: UCIP_SP_2018_52154_67337.jpg



Stand pipe with screw gate WS

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.	940 (cont)	
LM End	12.88	Issue Type +	Ма	Location *		
Category	Supplemental GPS Latitude/Long					le/Longitude
Calegory			Start			End
Item	DWR UC	IP LMA Respo	nsibility	39.4347	79°	39.434779°
пеш				-121.76394	10°	-121.763940°
DWR ID						
Comment Code						

Inspector Comment

FS ID:52154 DS_ID:16385 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 6/8/2017 8:57:36 AM



View of the inside of the WS stand pipe. No obstructions blocking slide gate.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	13.40	Rating **	М	Issue No.		19		
LM End	16.00	Issue Type +	En	Location *		LS		
Category	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End		
Item	Encroach	ments		39.4281	92°	39.414202 °		
item				-121.7684	43°	-121.781863 °		
DWR ID DWR_MA0013_02_s _ 2012_19								
		Comn	nent Cod	le				
DT : Ditch								
		Inspecto	or Comm	nent				

Photo 1 of 1 : SP_2018_MA0013_301_19_20180305_00007.jpg



View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941	
LM End	15.44	Issue Type +	Ма	Location *			
Catagony	Category				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.41920	09°	39.419209°	
пеш				-121.77368	80 °	-121.773680 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52156 DS_ID:16376 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall 4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by

vegetation.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe
through the levee, 10.1 feet below the crown. Flap gate on the
waterside (WS) end. Concrete "U" headwalls on both ends. [Additional
Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941 (cont)
LM End	15.44	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.41920	9°	39.419209°
item				-121.77368	°	-121.773680 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:52156 DS_ID:16376 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall 4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941 (cont)
LM End	15.44	Issue Type +	Ma	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP LMA Responsibility				9°	39.419209°
пеш				-121.77368	o°	-121.773680 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52156 DS_ID:16376 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



View of WS headwall and flap gate.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.		942	
LM End	15.68	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
DWR UCIP LMA Responsibility			39.4170	43°	39.417043	0	
пеш				-121.777240 °		-121.777240	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52157 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

LM Start	15.68	Rating **	М	Issue No.	942 (cont)
LM End	15.68	Issue Type +	Ma	Location *	



Overview of crossing looking downstream of the left bank of Cherokee



View of WS slope. Limited inspection due to the dense vegetation.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.	942 (cont)		
LM End	15.68	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	itud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.41704	3°	39.417043	0
пеш				-121.77724	0°	-121.777240	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52157 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

Photo 3 of 3: UCIP_SP_2018_52157_67350.jpg



View of WS headwall.

* Location	
LS: Land Side	N/A: Not Applicable
WS : Water Side	

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	15.98	Rating **	U	Issue No.		64
LM End	15.98	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Animal Control			39.4143	97°	39.414397°	
item				-121.7815	96°	-121.781596°
DWR ID DWR_MA0013_02_f _ 2016_64						
		Comn	nent Cod	le		
A3 : No roo compact o		le, but rodent rows.	burrows	visible; ne	ed to	backfill and
		Inspecto	or Comm	nent		



View of the rodent holes along the landside slope.

LM Start	16.02	Rating **	М	Issue No.		65		
LM End	16.02	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		39.4140	21 °	39.414021	0	
пеш			-121.782199 °		-121.782199	0		
DWR ID	DWR_MA0	013_02_f _ 201	6_65					
		Comn	nent Cod	le				
DE : Debri	S							
Inspector Comment								

No Photos

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	16.07	16.07 Rating ** M Issue No.		943			
LM End	16.07	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.4135	95 °	39.413595	0
пеш				-121.7828	90°	-121.782890	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52158 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS headwall was mostly buried and pipe end over 50% full of sediemnt. WS distribution box appears to have not been repaired yet but it does not seem to affect the integrity of the levee. (DWR Sutter Yard- AFreitag)11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed.

5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump

structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]

FS Date: 6/8/2017 9:41:12 AM



Overview of levee crown.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	16.07	Rating **	М	Issue No.		943 (cont)
LM End	16.07	Issue Type +	En	Location *		
Category	Supplemental				titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		39.4135	95 °	39.413595 °
пеш				-121.7828	90°	-121.782890 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52158 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS headwall was mostly buried and pipe end over 50% full of sediemnt. WS distribution box appears to have not been repaired yet but it does not seem to affect the integrity of the levee. (DWR Sutter Yard- AFreitag)11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed.

5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump

structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]

FS Date: 6/8/2017 9:41:12 AM



Appurtances on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	16.07	Rating **	M	Issue No.	943 (cont)		
LM End	16.07	Issue Type +	En	Location *			
Category	ental	GPS La	titud	le/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.4135	95 °	39.413595	0
пеш				-121.78289	90°	-121.782890	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52158 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS headwall was mostly buried and pipe end over 50% full of sediemnt. WS distribution box appears to have not been repaired yet but it does not seem to affect the integrity of the levee. (DWR Sutter Yard- AFreitag)11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed.

5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump

structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HI M 16 26)]

FS Date: 6/8/2017 9:41:12 AM



WS view of crossing.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	16.52	Rating **	U	Issue No.		54				
LM End	16.52	Issue Type +	Ma	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude				
Calegory				Start		End				
Item	Animal Co	ontrol		39.4095	48°	39.409548°				
item				-121.7896	68°	-121.789668 °				
DWR ID DWR_MA0013_02_f _ 2014_54										
		Comn	nent Cod	le						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.										
		Inspecto	or Comm	nent						



View of the rodent holes along the waterside slope.

LM Start	16.86	Rating **	M	Issue No.		944	
LM End	16.86	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory	egory			Start		End	
Item	DWR UC	P Field Study		39.40641	0 °	39.406410	0
iteiii				-121.79460	00°	-121.794600	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52159 DS ID:16841 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 5/30/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/17/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/26/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to locate.7/08/2013 Same as last inspection. Unable to

locate.4/24/2012 Dense vegetation limited inspection will need to verify is an features are still present at this location during the next inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee at approximately 14.5 feet below the crown. Flap gate located on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.06)]

FS Date: 6/8/2017 9:59:36 AM

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	16.89	Rating **	М	Issue No.		20		
LM End	18.72	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		39.4062	17°	39.389187°		
item				-121.794945 °		-121.821233 °		
DWR ID DWR_MA0013_02_s _ 2012_20								
	Comment Code							
DT : Ditch								
		Inspecto	or Comm	nent				



View of the agricultural ditch along the toe.

17.21	Rating **	Α	Issue No.		72			
22.17	Issue Type +	Ma	Location *		LS			
Cotogon/ Earthen Levee			GPS Latitude/Longitude					
Category					End			
Vegetation			39.403280°		39.359625°			
				52 °	-121.872652 °			
DWR ID DWR_MA0013_02_s _ 2018_72								
Comment Code								
V1 : Control annual grass and weeds on the levee slopes and easements.								
	22.17 Earthen L Vegetation DWR_MA0	22.17 Issue Type + Earthen Levee Vegetation DWR_MA0013_02_s _ 201 Commol annual grass and wee	22.17 Issue Type + Ma Earthen Levee Vegetation DWR_MA0013_02_s _ 2018_72 Comment Cool annual grass and weeds on the	22.17 Issue Type + Ma Location * Earthen Levee GPS Land Start Vegetation 39.4032 -121.7995 DWR_MA0013_02_s _ 2018_72 Comment Code OI annual grass and weeds on the levee slope	22.17 Issue Type + Ma Location *			

Inspector Comment

There is no vegetation along the landside slope.

hoto 1 of 1 : SP_	_2018_MA0013	3_301_72_201804	25_00142.j
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LM Start	17.41	Rating **	N	Issue No.		67	
LM End	17.41	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS La	atitud	e/Longitude		
Calegory	egory			Start		End	
Item	Trim / Thin Trees			39.4013	31 °	39.401331	c
пеш					80°	-121.802480	c
DWR ID	DWR_MA0	013_02_f _ 201	6_67				
		Comn	nent Cod	le			
T5 : Tree s	stumps.						_
		Inchecto	or Comm	ant			

Approximately eight stumps on the landside toe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiency Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	17.64	Rating **	М	Issue No.		69			
LM End	17.64	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Slope Sta	bility		39.3991	64°	39.399164°			
пеш				-121.8057	'87 °	-121.805787 °			
DWR ID DWR_MA0013_02_f _ 2016_69									
		Comn	nent Cod	le					
S1 : Repa	ir slope ins	tability.							
			_						
Inspector Comment									



View of slope instability issue along the landside slope.

LM Start	17.90	Rating **	М	Issue No.		70	
LM End	17.90	Issue Type +	Ma	Location *		LS	
Catagony	Earthen Levee			GPS Latitude/Longitude			
Category			Start		End		
Item	Animal Co	Animal Control			09°	39.396809°	
item			-121.8094	22 °	-121.809422°		
DWR ID	DWR MA0	013 02 f 201	6 70				

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes along the landside slope.

LM Start	17.93	Rating **	М	Issue No.		71			
LM End	17.93	Issue Type +	Ма	Location *	LS				
Category	Catagoni Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End			
Item	Animal Co	Animal Control			65 °	39.396465	0		
пеш	item		-121.8099	35 °	-121.809935	0			
DWR ID	DWR_MA0	013_02_f _ 201	6_71						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.		Issue No. 945		945
LM End	18.16	Issue Type +	Ма	Location *				
Category	Suppleme	ental		GPS La	atitud	e/Longitude		
Calegory	ory			Start		End		
Item	DWR UC	DWR UCIP LMA Responsibility			06°	39.394406°		
пеш				-121.8131	80°	-121.813180°		
DWR ID								

Comment Code

Inspector Comment

FS_ID:52161 DS_ID:16379 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/26/2016 Crossing appears to be in good condition.6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13E 2011 p 0134 for

unknown culvert size on LS and no outlet visible on WS.
FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe
through the levee, 13.2 feet below the crown. Flap gate on the
waterside (WS) end. Concrete "U" headwalls on both ends. [Additional
Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M
Manual 519, June 1962 (HLM 18.37)]

FS Date: 6/8/2017 10:18:47 AM

LM Start	18.16	Rating **	A/W Issue No.		945 (cont)
LM End	18.16	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52161_67387.jpg



Overview of crossing looking D/S at left bank of Cherokee Canal.



View of WS slope and berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.		945 (cont)	
LM End	18.16	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	itud	le/Longitude	
Calegory	gory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.39440	6°	39.394406	0
пеш				-121.81318	0°	-121.813180	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52161 DS_ID:16379 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/26/2016 Crossing appears to be in good

condition.6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to

LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 18.37)] FS Date: 6/8/2017 10:18:47 AM

Photo 3 of 3: UCIP_SP_2018_52161_67390.jpg



View of flap gate located on WS.

	1					
LM Start	19.37	Rating **	М	Issue No.		21
LM End	19.92	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Category	Calegory			Start		End
Item	Encroachments			39.3832	52°	39.378192°
Item				-121.8305	65 °	-121.838543 °
DWR ID DWR_MA0013_02_s _ 2012_21						
Comment Code						

DT: Ditch

Inspector Comment





View of the agricultural ditch along the toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	19.92	Rating **	М	Issue No.		946
LM End	19.92	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.37819	3°	39.378198°
пеш				-121.83857	°	-121.838570 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52164 DS_ID:16375 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD STRUCT DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

LM Start	19.92	Rating **	М	Issue No.	946 (cont)
I M End	19.92	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52164_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

Photo 2 of 3: UCIP_SP_2018_52164_67400.jpg



Erosion behind WS headwall at the upstream edge of headwall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	19.92	Rating **	М	Issue No.		946 (cont)	
LM End	19.92	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	le/Longitude	
Calegory						End	
Item	DWR UC	IP LMA Respo	onsibility	39.3781	98°	39.378198	0
пеш				-121.8385	70°	-121.838570	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52164 DS_ID:16375 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD STRUCT DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

Photo 3 of 3: UCIP_SP_2018_52164_67402.jpg



Flap gate located on the WS.

LM Start	20.43	Rating **	М	Issue No.	6		
LM End	20.74	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee				itud	e/Longitude	
Calegory			Start		End		
Item	Trim / Thi	n Trees		39.37309	1°	39.370795 °	
пеш				-121.84522	5 °	-121.850124°	
DWR ID	DWR_MA0	VR_MA0013_02_s _ 2013_6					
	Comment Code						

T1: Trim trees to at least five feet above ground level.

Inspector Comment



View of the overgrown trees along the landside slope.

* L	ocation		** Rating		+ Issue Type
1	S: Land Side N/A:	Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
V	/S : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
	CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.52	Rating **	М	Issue No.	73		
LM End	20.52	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	egory			Start		End	
Item	Encroach	ments		39.37248	36 °	39.372486 °	
пеш				-121.84653	37 °	-121.846537 °	
DWR ID DWR_MA0013_02_f _ 2016_73							
	Comment Code						

TR: Tree or limb

Inspector Comment

Remove the tree limbs from the landside slope and toe.



View of the tree limbs along the landside levee toe.

LM Start	20.65	Rating **	М	Issue No.		52
LM End	20.65	Issue Type +	Ma	Location *	t* LS	
Catagony	Earthen Levee			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	Encroach	ments		39.3714	33 °	39.371433
item			-121.8487	53 °	-121.848753	
DWR ID	DWR MA0	013_02_s _ 201	4 52			

Comment Code

TR : Tree or limb

Inspector Comment

Remove the tree limbs from the landside slope and toe.



View of the tree limbs along the landside toe.

LM Start	20.74	Rating **	N	Issue No.		74
LM End	20.74	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	titud	e/Longitude
Calegory				Start		End
Item	Trim / Thin Trees			39.37079	96 °	39.370796
item				-121.85012	24 °	-121.850124
DWR ID	DWR_MA0	013_02_f _ 201	6_74			
		Comn	nent Cod	de		
T5 : Tree s	stumps.					

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		947	
LM End	20.76	Issue Type +	En	Location *			
Category	Suppleme	plemental			GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.3706	76°	39.370676	
пеш				-121.8504	90 °	-121.850490	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52165 DS_ID:16383 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard -AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - AFreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/8/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/19/2012 LS pipe collars severely damaged-section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 6/8/2017 10:26:11 AM



Corrugated metal pipe risers with slide gates located on WS slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		947 (cont)
LM End	20.76	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		39.3706	76°	39.370676 °
пеш				-121.8504	90 °	-121.850490 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52165 DS_ID:16383 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard -AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - AFreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/8/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/19/2012 LS pipe collars severely damaged-section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 6/8/2017 10:26:11 AM



Corrugated metal pipe riser for pipe 1 of 3. Slide gate is missing handle.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		947 (cont)
LM End	20.76	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		39.37067	6°	39.370676°
пеш		,		-121.85049	0 °	-121.850490 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52165 DS_ID:16383 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard -AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - AFreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/8/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/19/2012 LS pipe collars severely damaged-section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 6/8/2017 10:26:11 AM



Sink hole observed behind WS headwall at the downstream edge of headwall. (Sink hole picture 1 of 2)

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		948	
LM End	20.76	Issue Type +	En	Location *			
Category	Suppleme	upplemental			GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.3706	79°	39.370679°	
пеш				-121.8505	00 °	-121.850500 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52166 DS_ID:17014 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

FS Date: 6/8/2017 10:32:03 AM

UCIP Comments: 5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard -AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]

LM Start	20.76	Rating **	U	Issue No.	948 (cont)
LM End	20.76	Issue Type +	En	Location *	



WS view of corrugated metal pipe risers.



Riser for pipe 2 of 3.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		Issue No. 948 (948 (cont)	
LM End	20.76	Issue Type +	En	Location *					
Category	Suppleme	pplemental			GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	CIP Field Study		39.3706	79°	39.370679	0		
пеш				-121.850500 °		-121.850500	0		
DWR ID									

Comment Code

Inspector Comment

FS_ID:52166 DS_ID:17014 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard -AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 6/8/2017 10:32:03 AM



View of pipe 2. Pipe 2 diverts flow to pipe 1.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		949	
LM End	20.76	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	P Field Study		39.3706	79°	39.370679°	
пеш				-121.8505	° 00	-121.850500 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:52167 DS_ID:17185 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard -AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates in corrugated metal pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 6/8/2017 10:32:50 AM

LM Start	20.76	Rating **	U	Issue No.	949 (cont)
LM End	20.76	Issue Type +	En	Location *	



View of corrugated metal risers located on WS.



View of corrugated metal pipe for pipe 3 of 3.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		949 (cont)
LM End	20.76	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		39.3706	79°	39.370679°
пеш				-121.8505	00 °	-121.850500°
DWR ID						

Comment Code

Inspector Comment

FS_ID:52167 DS_ID:17185 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard -AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates in corrugated metal pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 6/8/2017 10:32:50 AM



View of Pipe 3 of 3 from WS headwall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

	_							
LM Start	20.77	Rating **	M	Issue No.		75		
LM End	20.77	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Erosion /	Bank Caving		39.3706	41°	39.370641 °		
пеш				-121.8505	72°	-121.850572 °		
DWR ID DWR_MA0013_02_f _ 2016_75								
		Comn	nent Cod	de				
E1 : Note a	and monito	or erosion site	-					
		Inspecto	or Comm	nent				



View of the erosion along the waterside toe.

LM Start	21.03	Rating **	М	Issue No.		68
LM End	21.03	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Animal Co	ontrol		39.3686	82°	39.368682 °
item				-121.854817 °		-121.854817 °
DWR ID	DWR_MA0	013_02_s _ 201	8_68			
		Comn	nent Cod	le		
A1 : Extern	ninate rod	ents and back	fill and c	compact or	grou	t burrows.
	Inspector Comment					

Repair the rodent holes along the landside slope.



View of the rodent holes along the landside slope.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.		950
LM End	21.35	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.3661	55 °	39.366155 °
пеш				-121.8598	80°	-121.859880 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



Overview of crossing looking downstream.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.		950 (cont)
LM End	21.35	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.3661	55 °	39.366155
item			-121.8598	80°	-121.859880	
DWR ID						

Comment Code

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



View of WS daylight. Hole present at pipe daylight.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Mainten

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.	950 (cont)			
LM End	21.35	Issue Type +	Ма	Location *				
Category	ental		GPS La	tituc	le/Longitude			
Calegory	Calegory					End		
Item	DWR UC	IP LMA Respo	nsibility	39.36618	55 °	39.366155 °		
пеш				-121.85988	30°	-121.859880 °		
DWR ID								
	Comment Code							

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



WS-view of internal pipe with severe corrosion-holes present along pipe wall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	21.83	Rating **	М	Issue No.		951	
LM End	21.83	Issue Type +	Ma	Location *			
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.3623	78 °	39.362378	0
пеш				-121.8673	50°	-121.867350	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52170 DS_ID:16394 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

LM Start	21.83	Rating **	М	Issue No.	951 (cont)
LM End	21.83	Issue Type +	Ma	Location *	



Overview of crossing looking upstream at the left bank of Cherokee Canal.



View of WS headwall.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side CR : Crown	M : Minimally Acceptable U : Unacceptable	C : Corrected A/W : Acceptable but Monitor & Maintain	Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	21.83	Rating **	М	Issue No.		951 (cont)	
LM End	21.83	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.36237	8°	39.362378	0
пеш				-121.86735	o°	-121.867350	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52170 DS_ID:16394 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

Photo 3 of 3: UCIP_SP_2018_52170_67461.jpg



Flap gate located on WS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	21.86	Rating **	М	Issue No.		952	
LM End	21.86	Issue Type +	En	Location *			
Category	Supplemental				atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.3621	03 °	39.362103	٥
пеш				-121.8678	20°	-121.867820	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52172 DS_ID:16374 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/30/2017 Splice box still present at LS toe. (DWR Sutter Yard - AFreitag)11/17/2016 Splice box still present at LS toe. (DWR Sutter Yard - AFreitag)4/26/2016 Communication Splice box was still present. Not sure what was done to ever resolve the encroachment issue.6/30/2015 Same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012

Unauthorized Encroachment. This crossing is listed multiple times in

the USACE Periodic Inspection report as

USACE_CESPK_M13E_2011_p_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolve.

FIELD_STRUCT_DESC: *ILLEGAL ENCROACHMENT* Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along landside (LS) shoulder and levee crown hinge point. Levee sloughs along cable trench after heavy rains. [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/8/2017 10:39:36 AM

Photo 1 of 1: UCIP_SP_2018_52172_67480.jpg



View of utility line located on LS toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	21.87	Rating **	U	Issue No.		59
LM End	22.09	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Encroach	ments		39.3620	22°	39.360294°
пеш				-121.867949 ° -121.87133		
DWR ID	DWR_MA0	013_02_s _ 201	6_59			
		Comn	nent Cod	le		
DT : Ditch						
		Inspecto	or Comm	nent		

No Photos

LM Start	22.07	Rating **	М	Issue No.		4	
LM End	22.13	Issue Type +	En	Location *		LS	
Category	.evee	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	Vegetation				10°	39.359920°	
пеш				-121.871125 °		-121.872067 °	
DWR ID	DWR ID DWR_MA0013_02_s _ 2012_4						
		Comn	nent Cod	de			
V6 : Lands	scaping						
		Inspect	or Comm	nent			



View of landscaping along the toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.		953	
LM End	22.15	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.35982	27°	39.359827	0
пеш				-121.87230	00°	-121.872300	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52175 DS_ID:16391 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 6/8/2017 10:42:36 AM

LM Start	22.15	Rating **	М	Issue No.	953 (cont)
LM End	22 15	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_SP_2018_52175_67498.jpg



View of WS slope looking from WS headwall to levee crown.

Photo 2 of 3: UCIP_SP_2018_52175_67496.jpg



View of WS slope looking from WS headwall to levee crown.

Location Rating Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated A: Acceptable Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.		953 (cont)	
LM End	22.15	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.35982	27°	39.359827	0
пеш				-121.87230	00°	-121.872300	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:52175 DS_ID:16391 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 6/8/2017 10:42:36 AM

Photo 3 of 3: UCIP_SP_2018_52175_67497.jpg



View of flap gate on WS.

LM Start	22.16	Rating **	М	Issue No.	8		
LM End	22.16	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Encroachments ltem			39.3597	07°	39.359707°		
item				-121.872555 °		-121.872555 °	
DWR ID DWR_MA0013_02_s _ 2012_8							
Comment Code							
DD. Davidana							

PR : Prunings

Inspector Comment

Photo 1 of 1: SP_2018_MA0013_301_8_20180305_00003.jpg



View of the debris and prunings along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	04/17/2018 04/17/2018	Bob Duffey

LM Start	22.33	Rating **	A/W	Issue No.		62
LM End	22.33	Issue Type +	Ма	Location *		LS
Catagory	evee	GPS La	atitud	e/Longitude		
Category				Start		End
Item	Slope Sta	bility		39.3584	19°	39.358419°
пеш				-121.8750	88°	-121.875088 °
DWR ID DWR_MA0013_02_s _ 2016_62						
		Comn	nent Cod	le		
S1 : Repai	ir slope ins	tability.				
		Inspecto	or Comm	nent		

Photo 1 of 1: SP_2018_MA0013_301_62_20180305_00016.jpg



View of slope instability issue along the landside slope.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement